

Client

Growth Centres Commission

Project

**Oran Park
Community Facilities and Open Space
Assessment**

Final Report

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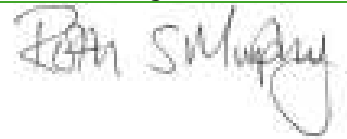


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Executive Summary

This report has considered the community facilities, human services and open space that will be required to support the residential and employment populations in the future Oran Park Precinct, within the South West Growth Centre. The report has been prepared for the Growth Centres Commission, as one of a number of technical studies undertaken to support the preparation of a precinct plan for the precinct. The study has encompassed both the Oran Park and Turner Road Precincts, with the outcomes related to the Turner Road Precinct presented in a separate report.

The report contains 8 chapters:

Chapter 1 provides an introduction and background to the study, and outlines its scope and process.

Chapter 2 outlines the policy background to the study, identifying objectives for the provision of social infrastructure and open space for the precinct within the Metropolitan Strategy, Growth Centres SEPP and Development Code, and policies of Camden Council. These objectives provide the framework and criteria against which the draft Indicative Layout Plan for the precinct, prepared by the landowners, may be assessed. The chapter also outlines a set of best practice principles for the provision of social infrastructure and the approach to the planning of social infrastructure and open space adopted in this study.

Chapter 3 examines the social context of the precinct, including the social profile of the population of the surrounding area and the availability of existing services, facilities and open space. It finds that most facilities and services will have no capacity to absorb demand generated by development within the Oran Park Precinct, and that a variety of new facilities, services and open space areas will need to be provided.

Chapter 4 examines the regional context and requirements for regional level facilities and areas of open space, in order to provide some context within which to identify social infrastructure requirements for the Oran Park Precinct. It identifies a number of fundamental issues about planning for the Growth Centre and the future development of Camden LGA that will require a response before regional facility requirements and locations can be determined. It also identifies the need to develop comprehensive regional strategies

for social infrastructure and open space that are based upon partnership and commitment amongst relevant local and state government agencies. An indicative hierarchy of facilities, services and open space is proposed in the absence of such strategies.

Chapter 5 considers the future population of the Oran Park Precinct. Based upon an anticipated yield of 7,600 dwellings derived from the draft Indicative Layout Plan, it is estimated that the future population of the Oran Park Precinct will be about 23,100 people at completion. This population will have reasonably similar characteristics to households in other recent release areas in South West Sydney, although it is likely to be more diverse, reflecting the greater mix of dwelling types.

Chapter 6 provides an assessment of the community facilities and services likely to be required for the future Oran Park population, and reviews the proposals contained within the draft Indicative Layout Plan. The precinct will need to provide a variety of both local and district level facilities. In the longer term, Oran Park will provide the town centre for a district catchment population of up to 90,000 people. However, at this stage district level facilities have been planned for a population of about 35,500 people, being the combined projected population for the Oran Park and Turner Road precincts. A number of issues are identified which will need to be addressed further in the next iteration of the draft ILP. These include the proposed location of 2 of the schools, the co-location of schools with other community facilities, the nature, number and location of community and childcare facilities, the need for a youth facility, and the size of the site proposed for civic and cultural facilities in the town centre.

Chapter 7 examines the likely open space and recreation requirements of the precinct and proposes an approach to the assessment of requirements based on likely demand and quality, rather than quantity of open space. In terms of district level open space, it has been assumed that passive recreation needs can be met within the designated riparian zones, conservation areas and wetlands, without the need to set aside additional areas of open space. However, it is recognised that this recommendation is not consistent with the current position of the Department of Natural Resources and the GCC Development Code, which preclude conservation areas being embellished for recreation purposes. Once this issue is resolved, recommendations and costings for embellishment of the district passive open space will be prepared. In terms of district level active open space, a range of indoor and outdoor sporting and recreation facilities are proposed, to be distributed across the combined Oran Park and Turner Road

catchment area. The recommended provision of local and district open space will need to be incorporated within the final ILP.

Chapter 8 provides a conclusion, highlighting the “big picture” issues that require further consideration and summarising the particular issues associated with the draft Indicative Layout Plan where further consideration is required. Critical issues include the need:

- to develop a regional social infrastructure and open space strategy which involves Camden and Liverpool Councils and other stakeholders to provide a framework for precinct planning;
- for Camden Council to articulate its approach to the development and hierarchy of its centres, to guide the distribution of major facilities and services;
- for a number of state government agencies to progress their internal planning for the growth centre so that sites for required facilities can be identified in the ILP;
- for an integrated planning structure for human services to enable joint planning to occur;
- for funding for community and cultural development strategies to be included as vital social infrastructure, with their resourcing to be included within infrastructure planning agreements; and
- for the use and embellishment of conservation areas for passive recreation to be resolved.

1 Introduction

This report provides an assessment of the community facilities and open space required to support residential and employment development in the Oran Park precinct, within the South West Growth Centre. The report has been prepared for the Growth Centres Commission, as one of a number of technical studies undertaken to support the preparation of a precinct plan. The study has been undertaken by Elton Consulting in association with Tangent Leisure Consultants, who have had responsibility for the open space and recreation components. The study has encompassed both the Oran Park and Turner Road Precincts, with the outcomes related to the Turner Road Precinct presented in a separate report.

1.1 Background to the study

In 2006 the NSW Government announced plans outlining the future of land releases in the North West and South West Growth Centres of Sydney. The Growth Centres will together provide for 180,000 homes over the next 30 years, characterised by staged delivery of infrastructure co-ordinated with land releases, new governance arrangements associated with the establishment of the Growth Centres Commission, and a focus on sustainability to achieve world's best practice standards.

The Oran Park Precinct is one of the initial precincts to be released for development within the South West Growth Centre. Under the guidance of the Growth Centres Commission, precinct planning for the Oran Park Precinct will involve preparation of:

- an Indicative Layout Plan (ILP) to guide planning and assessment of the precinct
- a precinct planning report summarising the specialist investigations
- a development control plan
- a Section 94 Contributions Plan
- an amendment to State Environmental Planning Policy – Sydney Growth Centres to facilitate the formal rezonings.

The Oran Park Precinct, along with the nearby Turner Road Precinct, is located within the Camden local government area. For both of these

precincts, the Growth Centres Commission is working closely with Camden Council to facilitate the precinct planning process.

1.2 Development context

The Oran Park Precinct is located in the southern sector of the South West Growth Centre, to the north of the established parts of Camden and its existing release areas of Harrington Park and Harrington Grove. Oran Park is located on primarily rural land and comprises 1,300 hectares, divided amongst two major landowners and 10 smaller landholdings.

The Precinct is irregular in shape. The boundaries of the Oran Park Precinct include South Creek to the east, Cobbitty Road to the south, and the Denbigh homestead and rural lots to the west. To the north lies the future Maryland Precinct, while the future Catherine Field Precinct adjoins to the east. The precinct is bisected by the Northern Road, which delineates the landholdings of the two major landowners.

The Precinct includes the Oran Park Raceway, in operation for another couple of years and standing in the geographic centre of the site, occupying a high vantage point. It also contains the Denbigh homestead, a State significant property. The precinct proposal incorporates a heritage curtilage and a landscape transition zone to maintain its integrity. The Oran Park homestead is located adjacent to the south eastern site boundary, and is a significant heritage item.

The Macarthur Anglican School occupies a site at the north-west intersection of the Northern Road and Cobbitty Road. The school offers infant, junior and senior classes on the one site.

The Growth Centres Commission has adopted a target of 8300 dwellings, together with retail, commercial and employment land, for the Oran Park Precinct. The precinct will accommodate the Oran Park town centre which is proposed to be the second largest centre within the Growth Centre after Leppington. A draft Indicative Layout Plan has been prepared for the precinct, based on the aspirations of the landowners and input from their urban design consultants. The draft Indicative Layout Plan is described in Chapters 5 and 6 of this report.

The site contains vegetation of high conservation value, particularly along the South Creek corridor, which will impact on the nature of recreational activity permissible.

1.3 Scope of this study

The Community Facilities and Open Space Assessment provides specialist advice to support the preparation of the Oran Park Precinct Plan with regard to:

- the community facilities and open space requirements of the Oran Park precinct, based upon an estimated dwelling yield of about 7,600 dwellings;
- identification of opportunities for innovative and site responsive strategies, including co-located and shared facilities;
- identification of requirements for regional level community facilities and open space, and their potential location and delivery strategies within the subject precinct;
- identification of spatial and locational criteria and costings for recommended social infrastructure, suitable to inform a section 94 contributions plan;
- recommendations for strategies with regard to management and land titling to facilitate social infrastructure outcomes, and for integration with conservation and other infrastructure outcomes.

1.4 The study process

Preparation of this study has involved:

- Review of existing policies and background studies from both Camden Council and the GCC / Department of Planning;
- Participation in workshops with other members of the consultant team, the land owners and their urban design consultants (the Precinct Working Group) to consider the draft Indicative Layout Plan;
- Analysis of the social context for the Oran Park Precinct, including demographic analysis of the surrounding and regional population (using ABS Census data) and assessment of existing community facilities, human services and open space in the surrounding area (drawing on previous studies and consultation with local service providers);
- Preparation of demographic forecasts for the Oran Park Precinct, based upon anticipated dwelling yield and mix;

- Consideration of likely market take-up rates and identification of impacts on the timing of provision of social infrastructure;
- Consideration of regional social infrastructure planning issues for the South West Growth Centre as a whole, to provide context for the Oran Park Precinct;
- Identification of social infrastructure required to meet the needs of the residential and employment populations of the Precinct. This has involved review of existing agency standards and policies, and consultation with state government human service agencies and other service providers to ensure their involvement in the planning process and commitment to recommended outcomes. This was primarily undertaken through two Human Services Agencies Workshops held in December 2006 and January 2007;
- Meetings with Camden Council community service and open space staff;
- Further consultation with individual agency stakeholders regarding location, delivery and costing details of proposed social infrastructure;
- Further liaison with other members of the consultant team, particularly with regard to integration of social infrastructure and open space outcomes with conservation, economic development and transport outcomes;
- Review of the draft Indicative Layout Plan in terms of the findings of this study, and feedback to the Working Party regarding the nature, number and location of facilities and open space recommended for the Precinct.

2 Policy Context

A range of policies have been examined to provide context and guidance for the planning and delivery of social infrastructure (community facilities, human services and open space) for the Oran Park Precinct. These policies also provide the criteria against which the draft Indicative Layout Plan for the Precinct may be reviewed. More broadly, the policy review has also identified the social objectives directed at ensuring that the communities created within the Precinct will be socially sustainable.

The policy review has considered:

- the Sydney Metropolitan Strategy
- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- the Growth Centres Development Code
- the strategic and social planning policies of Camden Council
- relevant policies of other State Government agencies.

A brief outline of relevant issues contained in these policies is presented below.

2.1 Sydney Metropolitan Strategy

Enhancing Liveability is one of five aims within the Metropolitan Strategy to achieve a more sustainable Sydney. Key objectives with regard to Enhancing Liveability include to:

1. focus residential development around town centres, villages and neighbourhood centres;
2. concentrate economic activity, services and facilities in centres, which are well designed, viable, vibrant, safe and close to public transport;
3. create more employment opportunities in Western Sydney, close to where people live;
4. plan for a housing mix near jobs, transport and services;

5. provide for a range of dwellings suited to the changing population;
6. improve housing affordability;
7. promote good access to services and timely infrastructure;
8. improve access to shopping, friends and family, parks and recreation and other daily activities;
9. encourage use of active transport – public transport, walking and cycling - to improve community health and connectivity to services and facilities;
10. promote active healthy lifestyles and community interaction through provision of parks, sporting facilities and public places;
11. provide a diverse mix of parks and public places and improve the quality of local open space;
12. apply sustainability criteria for new urban development. The sustainability criteria include the provision of mechanisms to ensure infrastructure (including social infrastructure) is provided in a timely and efficient way, and that adequate and accessible services and facilities are available to meet quality and equity objectives.

2.2 The Growth Centres SEPP

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 provides the statutory planning framework for the Growth Centres and establishes the broad planning controls for their development. In particular it identifies areas of open space and environment conservation to be protected, areas that are flood prone or major creek lands and transitional lands that need to be further assessed in the precinct planning process.

The objectives of the SEPP include:

- to enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and high quality local amenity;
- to provide controls for the sustainability of land in those growth centres that has conservation value;

- to provide for the orderly and economic provision of infrastructure in and to those growth centres.

The SEPP also provides objectives for Public Recreation: Regional and Local Zones, which include:

- to enable the land to be used for regional open space or recreation purposes that are consistent with the protection of its natural and cultural heritage values.

2.3 The Growth Centres Development Code

The GCC Development Code provides the basis for the planning and design of precincts and neighbourhoods within the Growth Centres, and a guide to the incorporation of best practice standards. The Development Code contains a large number of objectives to guide the planning and provision of community facilities and open space. They include:

- achievement of quality design outcomes;
- infrastructure investment to keep pace with development;
- a range of housing types to suit the needs of all members of the community;
- planning to enable residents to walk to shops for daily needs;
- easy access to town centres with a full range of shops, recreational facilities and services, along with smaller village centres and neighbourhood shops;
- a range of land uses to provide the right mix of houses, jobs, open and recreational spaces.

Specific objectives of the Development Code address particular elements and include to:

- increase housing choices;
- Provide facilities and services at a local level, including parks, libraries, shops, schools, and health facilities;
- Improve walking and cycling pathways, especially between residential areas and shops and schools;
- integrate existing infrastructure;

- provide, protect and maintain a range of open space opportunities throughout the entire precinct;

- provide a range of commercial and retail opportunities;
- enhance safety, maximise surveillance and minimise opportunities for crime;
- utilise public places and public buildings to promote community identity.

Specific Development Code objectives with regard to community facilities include:

- to provide community facilities within walking distance of residential neighbourhoods and transport nodes;
- to provide access to a wide range of social and community facilities catering for different social groups and age groups;
- to create good access to new areas of open space and community facilities;
- to improve access to existing parks and recreational facilities;
- to minimise the impact of access ways on the environmental qualities of public open space;
- to provide good, but unobtrusive, access.

The Code also provides objectives in relation to the location, co-location and multiple use of community services and facilities in order:

- to facilitate efficient use of resources and services through maximising opportunities for joint, shared or multiple-use of open space and community facilities;
- that adequate social, cultural and community facilities are appropriately located in relation to public open spaces;
- to facilitate the viability of social facilities by means of appropriate location and distribution;
- to maximise accessibility and convenience of social facilities and services through co-location;
- to facilitate social and community facilities that meet the future requirements of the population;
- to provide for the social needs of future communities;

- to enable adequate land to be made available for the provision of social infrastructure;
- to facilitate the timely provision of community facilities and services;
- to locate community facilities within the centres and neighbourhoods;
- to create opportunities for the optimal use of land and resources, educational and community facilities.

The Development Code objectives relating to public open space aim to balance the dual function of the undeveloped land for both recreational purposes and stormwater management systems. In addition the land needs to be accessible and useable by the public for a wide range of activities. Specific open space objectives include:

- to integrate stormwater management and water sensitive urban design with networked open space;
- to provide a balance of useable and accessible open space with neighbourhood and district stormwater management;
- to protect recreational uses;
- to provide an interconnected network of open spaces;
- to integrate public open space into the urban structure to maximise land use efficiency;
- to facilitate the provision of public open space of an appropriate quality and quantity;
- to facilitate the provision of public open space and its development as part of the subdivision process;
- to provide a diverse mix of open spaces and community facilities designed to cater for a range of uses and activities;
- to facilitate the provision of sporting and recreation facilities that can meet the needs of future communities;
- to provide amenity to residential areas;
- to avoid pressure to existing open space systems in surrounding areas.

Additional open space objectives with regard to urban spaces and connections include:

- to provide public open space that is pleasant, safe and usable both during daytime and at night;
- to integrate open space with the mix of uses in the town centre to form a focal point;
- to provide residents with accessible passive and active recreational opportunities;
- to provide open space that promotes local character and identity;
- to provide play spaces which are designed and located to be safe and convenient and to assist in childhood development;
- to retain existing stands of remnant vegetation and to associate them with passive recreational facilities;
- to provide open space for a diversity of interests catering for a wide range of users.

The Development Code also contains a set of Precinct Development Parameters which provide some guidance in establishing benchmarks and thresholds for the planning of open space and social infrastructure in precincts.

2.4 Camden Council Policies

The study has reviewed the following Council planning policies:

- Camden 2025: A Strategic Plan for Camden
- Camden Council Community Plan (2004/9)
- Camden Council Community Well Being Policy (2003)
- Camden Sustainability Indicators (2003)
- Camden Children & Families Strategic Plan (2005-2010)
- Camden Youth Strategic Plan (2005-2010)

The Council policies together provide a sound and consistent framework for considering the social sustainability of the Oran Park Precinct and more specifically its requirements for social infrastructure and open space. An outline of relevant aspects of each of the policies listed above is provided in Appendix 2. In summary, key Council objectives include:

1. Achieving housing choice and population diversity, to create social mix and a balanced community;
2. Creating a pleasant and safe environment which promotes a sense of security, health, well-being and quality of life, with liveable neighbourhoods and spaces for social interaction;

3. Providing a range of facilities, services and open space that reflect the local community's values and aspirations, promote the health and well-being of residents, support their lifestyle choices, and encourage the development of social capital. Timing and accessibility of social infrastructure are also priority objectives;
4. Providing convenient and equitable access within the precinct and to employment, education, shops, and facilities in the wider region, through public transport and mobility strategies;
5. Creating an identity and image for the development that promotes civic pride and celebrates its unique sense of place, and its natural and cultural heritage;
6. Integrating with surrounding communities and the wider region, both physically and socially, in ways that promote inclusion and social cohesion and fair access to resources;
7. Providing opportunities for all sections of the population to become involved in the life of the community, to develop community networks and connections with other residents, and to support cultural development initiatives;
8. Providing opportunities to participate in the on-going planning and development of the community and to develop stewardship over its resources.

Additionally, Camden Council's policies recognise the need to preserve and enhance the visual, cultural and scenic landscape qualities that characterise the Camden area, and the provision of open space is critical in this context. Open space is important in:

- creating appropriate separation, containment and linkage of urban development;
- preserving cultural landscape elements by the retention of view corridors and adequate buffers around significant heritage items;
- establishing sustainable populations of native flora and fauna; and
- providing appropriate recreation and leisure opportunities for the community.

Camden Council has developed an Open Space Framework Plan 2002 which identifies three primary functions of open space within the Camden Local Government Area. These functions apply to all land, irrespective of land ownership, usage and location, and encompass:

- biodiversity & environmental preservation
- scenic and cultural landscape preservation, and
- recreation and leisure use.

The Oran Park and Turner Road Precincts contain environmentally significant open space, which is defined by Camden Council's Open Space Strategy as *"land which exhibits distinctive scenic appeal or natural and cultural heritage qualities."*

Within Camden, these areas generally include hills, ridgelines, floodplains, watercourses and remnant native vegetation, as well as those landscapes which demonstrate historic settlement patterns. The policies also recognise the importance of retaining adequate curtilage around historic and cultural sites to ensure the integrity of these items are preserved and enhanced.

The design of open space areas should allow for the provision of movement and vegetation linkages or corridors to connect habitat areas and significant features to allow for the movement of flora and fauna. Consequently, recreation opportunities may need to be sensitive in particular areas and access controlled or restricted to preserve sensitive areas. Conversely, the provision of passive recreation opportunities may be used to reinforce and preserve the integrity of the open space areas.

2.5 Other relevant policy studies

The study has also been guided by several other government policy documents and directions, including:

- NSW Legislative Assembly Standing Committee Inquiry into Sportsground Management in NSW (2006)
- Urban Design Guidelines with Young People In Mind DUAP (1999)
- Parliamentary Enquiry Into Children, Young People And The Built Environment NSW Parliament (2006)
- NSW State Plan (2006) Priority E8: More people using parks, sporting and recreational facilities, and participating in the arts and cultural activity;
- NSW Healthy Ageing Strategy, and
- a variety of health policies promoting exercise, fitness and activity to reduce obesity in children and adults and promote healthy lifestyles (eg the NSW Health Obesity and Active Recreation program).

Key elements of these policies are also outlined in Appendix 2.

2.6 Principles for sustainable social infrastructure

Based on the objectives contained within the State and local government planning policies outlined above and best practice principles, objectives for

the provision of sustainable social infrastructure in Oran Park and Turner Road Precincts include to:

1. provide facilities and services in an efficient, timely and co-ordinated way to support the pattern of development. This means ensuring that facilities and services are available to residents as early as possible and they are not disadvantaged through delays in delivery;
2. make most efficient use of limited resources, for instance through designing community facilities to be multipurpose, co-located with other facilities and able to accommodate shared and multiple use arrangements;
3. cluster related facilities and services, preferably within designated centres or hubs, to promote civic identity, safety, accessibility and focal points for the community;
4. ensure facilities and services are accessible by public transport and located to maximise access for pedestrians and cyclists;
5. ensure flexibility in the design and use of facilities, so they can respond and adapt as needs change. Where possible, buildings should be capable of delivering a range of services, rather than designated for single uses or specific target groups that may quickly become outdated;
6. promote equitable access for all sections of the population, through the distribution, design and management of facilities. In particular facilities should be affordable for their target population;
7. provide environmentally and economically sustainable buildings;
8. ensure viable levels of resourcing, particularly recurrent funding for staff and programs, not just initial capital development;
9. promote innovation and creativity in the way agencies come together to deliver and integrate services that aim to enhance community capacity and resilience;
10. develop sustainable ownership, governance, management and maintenance arrangements for facilities.

2.7 Approach to planning social infrastructure

In social infrastructure planning, facilities and open space resources are commonly considered at three levels:

- Neighbourhood level services and facilities, available within about five - ten minute walking distance for most residents, and generally provided for a population of about 4,000 –

12,000 people. These core services are required by most new residents from the outset of settlement to meet their local everyday neighbourhood needs. Without access to such basic services, residents are likely to be significantly inconvenienced or disadvantaged and for this reason it is considered that these services should ideally be available from the time the first residents move into an area, or as soon as possible afterwards. Neighbourhood level facilities include:

- corner shop, general store
 - local shops and services
 - spaces for informal meeting and gathering
 - spaces for local activities such as a neighbourhood community centre
 - childcare centres
 - local parks and playgrounds
 - primary school
 - doctor's surgery, medical centre
 - churches
 - public telephones and post boxes.
- District level services are more specialist services which operate on a broader district catchment (about 15,000 – 50,000 people). These will vary according to the particular characteristics and needs of the population. They are usually staged to respond to the achievement of population thresholds, with numbers sufficient to support their provision. They will include:
 - a large cluster and variety of shops and commercial services
 - a high school and other learning facilities
 - civic and cultural facilities, including a branch library and community arts spaces
 - entertainment, leisure facilities and services,
 - sporting and recreation facilities
 - larger areas of open space for passive recreation
 - a range of medical and community health services
 - individual and family support services, and services addressing particular issues such as welfare, legal aid, employment, housing
 - facilities and services for particular sections of the population, such as young people, older people, people with a disability, people from culturally and linguistically diverse communities
 - larger places of worship
 - emergency and safety services.

- Sub-regional and regional level services, comprising major facilities for a population of over about 100,000 people, and including:

- health services,

- tertiary education facilities – TAFE colleges and university,
- major cultural and civic facilities – eg large performing arts venue, exhibition space, local government branch office, major library,
- specialist higher order entertainment and leisure facilities,
- major recreation and sporting facilities – eg stadium, regional park, botanic gardens.

Social infrastructure is provided by a wide variety of agencies, including all levels of government, non-government organisations and the private sector. At this precinct planning phase, the strategy needs to focus on the facilities which may have significant land requirements, to ensure that sufficient land is identified in appropriate locations to meet future need. This focuses particularly on facilities and services provided by local government and State Government agencies (such as schools). Services provided by the Commonwealth Government (eg employment services, some family services, veterans' services,) have land requirements that are likely to be relatively modest, and most likely will use available commercial office space within designated centres. Such sites can be identified in subsequent detailed levels of planning.

Sites for facilities provided by the non-government and private sectors are usually acquired through the private market and will need to be considered at a later stage of development as demand is established. At the same time, it is recognised that some types of private / non-government facilities may have significant land requirements. These include private schools, private hospitals and medical services, churches, private childcare services, commercial gym and fitness facilities, residential aged care facilities and entertainment facilities such as cinemas, hotels and restaurants. The Precinct Plan will need to allow sufficient scope and flexibility to accommodate such uses as demand emerges.

2.8 Approach to open space planning

Parks have been categorised into the following standards to provide guidelines for each area.

Table 1: Categories of Open Space

Categories	Catchment	Uses
Regional Park	Provide for active and passive needs of the wider population who may travel from a 15-25km radius catchment. Space requirement 25 Ha plus.	May have conservation, passive and sporting recreation opportunities. It attracts a wider range of users and has more extensive infrastructure of parking, amenities and facilities including BBQ, food and beverage outlets and hire equipment. Regional sporting facilities include capacity to host events with spectators and are classified by the number of competitors and spectators they can accommodate. Proximity to public transport, hospitality and road networks are essential.
District Park	Provide for active and passive needs of the wider catchment area. Space requirement 5-10ha	Range of uses include competition standard sports field, courts and ovals as well as facilities, lighting and gardens. Parking and Amenity buildings need to be included in quantum. Playing fields for sport located outside flood prone land. Leisure Centre may be located on District Open Space.
Local Sports Park	Provide for precinct catchment only Space requirement 3-5ha	Predominantly a destination park with competition standard sports facilities and amenities but also more passive recreation and social areas.
Managed Lawns	Provide for passive recreation at the neighbourhood level Space requirement 0.3-2.5ha	Informal play spaces area for community/family gatherings with kickabout area but no formal sports markings.
Playspaces	Provide for local residents located within walking distance of dwellings	A range of play equipment, cycletracks and age appropriate
Conservation Area	Conservation objectives dominate design and inclusions.	Primarily concerned with the protection of significant flora and fauna but may provide passive recreation opportunities.
Riparian Zones	Provide for drainage and flood storage areas.	Retained or enhanced in their natural state they may protect areas of native vegetation. Suitable for linear walkways and cycleways as well as seating, picnic and BBQ areas.
Pathways	Design considerations should focus on safety and security as well as amenity for users.	Provide for active transport, walking, cycling within residential areas, as well as along roads between villages and centres and alongside conservation corridors.

3 Existing Social Context

It is important to understand the social context of any new development, to ensure that its planning takes account of and is responsive to the surrounding social conditions and that it will integrate, both physically and socially, with the surrounding area. This chapter presents an overview of the social context for development within the Oran Park Precinct. It considers issues of growth and change in Camden, the

characteristics of the population that surrounds the subject site and the availability of existing community facilities, human services and open space that could address some of the needs of the future new population.

3.1 Existing social context

South West Sydney, and Camden LGA in particular, have experienced very considerable urban development in the last decade or so. In 1991, Camden LGA had a population of just 22,500 people. By 1996, this had grown to around 32,000, and by 2001 to 43,700 people.

Since the 2001 census, further population growth has occurred in a number of new release areas within the LGA, particularly Harrington Park, Mount Annan and Currans Hill. It is estimated that by December 2006, the population of Camden LGA had grown to around 50,800 people.

Further development has been approved to occur in Harrington Grove, the Mater Dei site, Manooka Valley, Mount Annan South, Spring Farm and Elderslie. Just beyond the Growth Centres boundary in the Central Hills area, further residential development is being considered within the Camden Lakeside, Gledswood and former El Caballo Blanco sites. These developments within the current growth area, when completed, are likely to increase the Camden population to around 77,200 people.

The South West Growth Centre will, at completion, have a population of between about 250,000 and 300,000 people. It is estimated that about 162,000 of these people will live within Camden LGA. This will bring the total population of Camden to nearly 240,000 people in the next 30 years.

This very substantial growth has enormous implications for the planning and delivery of social infrastructure. Rapid population growth has placed strain on existing services and facilities within Camden, which are struggling to keep pace with new development. Any spare capacity in existing facilities and services which does currently exist is likely to be taken up by the developments currently approved in Camden outside of the Growth Centres boundaries, and so will not be available for the Growth Centre population. Camden in 25 years or so will have a population of a scale similar to Blacktown LGA, or to Canberra, requiring a very different range of facilities and services than that required for its current population.

Further social issues associated with the rapid rate of urban development within Camden include:

- There have been community concerns about the need to preserve the rural and historic identity, country atmosphere and quality lifestyle that have been key attractions of living in Camden;
- There is a shortage of local employment opportunities and many residents spend considerable time commuting to work outside the region. Time spent commuting can restrict time available for recreation and family life and for involvement in community life, pointing to a need for facilities and activities that are locally based.
- Newcomers separated from established support networks may experience isolation and dislocation, pointing to a need to foster social support networks and services.
- The relatively high cost of new housing creates financial stress for many households, pointing to a need for social and recreational opportunities that are affordable.
- There is a need for strategies to promote the integration of new and existing populations and communities, to foster community cohesion and identity and help ensure that the change process does not strain social harmony.

3.2 Social Profile of the Surrounding Area

Understanding the profile of the existing population of an area can help in predicting the characteristics of the new population attracted to development, as well as underpinning strategies to promote integration of new and existing communities. The study has considered the social

profile of the Camden LGA as a whole, as well as three sub-areas relevant to the Oran Park and Turner Road Precincts, using the 2001 ABS Census of Population and Housing. These small areas are:

- The locality of Oran Park,
- The rural and semi-rural areas in the north east of Camden which include the Central Hills sites, Catherine Field, Leppington and Rossmore. The Turner Road Precinct falls within this small area (identified as Area 8 in Council's community profile), and
- The suburb of Harrington Park. This area adjoins the Turner Road Precinct and, as a recently developed estate, has a population profile likely to be similar in many ways to the future Oran Park and Turner Road populations.

It is noted that while the existing populations of both Oran Park and Turner Road Precincts are likely to be displaced by proposed South West Growth Centre development, such development will occur over a 15-20 year period. Given this timeframe, it is important to understand the characteristics of the existing population, to enable comparison of similarities and differences with the anticipated future population.

The profiles of these areas have been compared with the Macarthur regional profile and the Sydney Statistical Division to provide a benchmark for comparison.

Detailed tables and statistical information pertaining to the social profile of the surrounding area can be found in Appendix 1. A summary of the salient points is provided below, to provide a snapshot of the area.

3.2.1 Profile of the City of Camden

The population of the City of Camden differs from that of Sydney as a whole in some important ways:

- It has very high rates of population growth, associated with the release of new residential areas. Between 1996 and 2001 its annual growth rate was 7.3%, compared with 1.3% in the Sydney Statistical Division.
- It has a younger age profile, a high proportion of children and relatively low proportion of older people. The median age is 30, compared with 34 years for Sydney as a whole.
- It has a high proportion of family households with children (48% of all households, compared with 36.6% for Sydney as a whole). It has a corresponding low proportion of other types of

households (for instance only 13% of households are lone person households, compared with 22% for Sydney as a whole).

- Associated with its predominance of family households, it has a relatively large average household size (3.0 persons compared with 2.7 persons for Sydney as a whole).
- It is relatively culturally homogeneous and has low proportions of indigenous people and people from non English speaking backgrounds (with only 7.5% of people born in a non English speaking country, compared with 23% for Sydney as a whole).
- It has relatively high proportions of residents in the higher household income brackets and low rates of unemployment. The median weekly household income is \$1000-\$1199, compared with \$800-999 for Sydney as a whole.
- It has lower rates of people with university qualifications and employed in professional and managerial occupations, but higher rates working in trades, clerical, service and sales positions.
- It has very high rates of home ownership and vehicle ownership, and
- A very high proportion of its housing stock is separate houses (92%), with very low proportions of medium density dwelling types.

3.2.2 Characteristics of sub areas within Camden

Oran Park

The current population of Oran Park has characteristics which differ from the wider Camden area.

- Population growth has been much lower and the population is a fairly stable one. Between 1996 and 2001 its annual growth rate was only 0.7%.
- The population has an older profile to that of Camden, with higher proportions of teenagers, young adults and people in their 40's and 50's, suggesting mature families. The median age for the suburb is 32.
- Oran Park has by far the highest proportion of couples with children (75%) of all the areas examined. Correspondingly Oran Park has a large average household size of 3.4 persons.

- Weekly household income levels have high levels of occurrence at both the lower brackets \$0-699 and the highest bracket \$2000+. However, the median weekly household income is \$1000-\$1199, the same as that of Camden as a whole. A high percentage of people are employed as managers and administrators.
- Given the rural location, there is a higher proportion of the workforce employed in agriculture (8.9% compared to 2.3% in Camden).
- A high percentage of children (11.1% compared with 7.7% in Camden) are attending secondary school, which demonstrates the more mature life cycle stage of the majority of residents.
- The area is characterised by a stable population with low population growth and more mature families. There is a larger proportion of middle aged and older people residing in the area with 14.7% of the population aged 60+, in contrast to 10.5% in Camden.
- Reflecting this trend is a large proportion of lone person households, making up 14.2% of the population when contrasted to Oran Park with only 3.6%.
- The area has a more culturally diverse population than surrounding suburbs with 31.4% of people, compared with 8.8% in Camden, speaking a language other than English at home. The top three languages spoken were Italian, Chinese and Arabic.

Harrington Park

Harrington Park, as a new residential development, has attracted a different population to the surrounding established areas. Key characteristics include:

- The high proportion of young families with pre-school and primary school aged children. 26% of the population are aged 0-11 years (compared to 21% for Camden). There are also much higher proportions of adults in their 20's and 30's.
- The families are predominantly Australian born and 89.5% speak English only, resulting in limited cultural diversity within the local population.
- The Harrington Park residents are the most affluent of the areas studied, with high proportions in the upper income brackets (18.3% with weekly earnings of \$2000+). This is reflected in the relatively high cost of the housing in the development.
- Correspondingly the Harrington Park residents have the highest levels in employment (96.5%) and are most frequently employed as professionals / managers in occupations such as finance, insurance and business services (16.1% compared with 12.9% for Camden).
- The major characteristic of the Harrington Park development is the dominance of separate housing at 99.6%, with the remaining 0.4% being semi-detached.
- The area has a larger proportion of residents in the lower income brackets. 30.3% have a weekly household income between \$0-699 whilst in Camden this figure is 24.4%. Lower incomes are related to the higher number of people with no educational qualifications. The area also had the lowest levels of computer (35.7%) and internet use (27.9%) in the study.

3.3 Assessment of existing community facilities and services

Existing human services and community facilities that could be accessed by the future population of the Oran Park Precinct have been identified and examined to determine their availability and capacity to absorb demand generated by the future population. These include:

- local level facilities, such as primary schools, childcare centres and community centres, in the suburbs adjoining the precinct;
- district level facilities, such as high schools, libraries, community health and welfare services in the wider LGA; and
- regional level services, such as tertiary education, hospitals and major entertainment and cultural facilities located outside Camden LGA in the Macarthur Region.

Existing services and facilities in the surrounding area are described in Appendix 3. In summary, the assessment of existing facilities and services has found:

- Local level facilities have been provided in adjoining areas to meet the needs of their local neighbourhood catchments, and have a local

Catherine Field Area

The Catherine Field area includes the Turner Road Precinct and rural residential settlements around Catherine Field, Leppington and Rossmore. The area demonstrates similar characteristics to Oran Park.

focus which does not extend to the Oran Park Precinct. They are generally already being used to capacity, or will be used to capacity as proposed development outside of the Growth Centre boundaries occurs (eg Harrington Grove, Mater Dei, Gledswood and Lakeside sites). There is no spare capacity in local level facilities that may be utilised by the Oran Park Precinct population.

- In particular, there is no available capacity in local childcare centres or pre-schools, and very little spare capacity in other family support and children’s services. Existing capacity in local primary schools (eg Harrington Park) will be taken up by the Harrington Grove development and will not be available for Oran Park.
- District level facilities, including a district shopping centre, community centre, library, community health centre, medical services, youth service, aged care services and branches of welfare and support services are located in Narellan, with additional cultural and commercial facilities in Camden Town Centre. These services have been developed to meet the needs of the existing population and will not be able to service the Oran Park population without augmentation. In particular, current health centre, welfare support services, aged care and youth services are already stretched coping with the rapid population growth that has already occurred in the area.
- Local primary schools in the surrounding area are already at capacity, or will be fully utilised once existing release areas are developed. In terms of high schools, Elizabeth Macarthur High School at Narellan Vale, and Elderslie High School currently have some spare capacity, but this is expected to be utilised as proposed development in Harrington Grove, Spring Farm and Elderslie occurs. Spare capacity in Mount Annan High School will be utilised for the Turner Road Precinct.
- Catholic primary schools in Narellan Vale and Camden have already reached their maximum capacity and will be unable to absorb additional students. Similarly the Catholic high school, Magdalene College, in Narellan Vale, is already operating at capacity.
- The Oran Park Precinct has good access to two private schools: Macarthur Anglican School, a co-educational kindergarten to Year 12 school which adjoins the Precinct to the south on Cobbitty Road, and St Gregory’s College, a high school for boys only which adjoins the Turner Road Precinct. Both these schools are likely to have some capacity to meet demand arising from the Oran Park Precinct.

- Camden has an existing identified shortfall in services, facilities and leisure and entertainment opportunities for young people.
- Camden Hospital is a small district level hospital administered under joint management with Campbelltown Hospital. The services are closely networked with Campbelltown Hospital which is the major metropolitan hospital for the Macarthur region.
- Regional level facilities serving the Camden population are located in Campbelltown and include hospital, TAFE, university, government agency branches, major welfare services and major retail, commercial and entertainment facilities. While commercial services and tertiary facilities may benefit from the extra business generated by the growing population, health and welfare services will not be able to cope with growing demand without additional resources.

In summary, it is recognised that existing facilities and services will not have capacity to meet the very substantial needs generated by development within the South West Growth Centre, and that a range of new facilities and services will be required

3.4 Assessment of existing open space and recreation facilities

3.4.1 Regional open space

Existing regional parks and sporting facilities in proximity to the South West Growth Centre include:

Existing Regional Parks

Western Sydney Regional Parklands

Georges River Regional Park

Kemps Creek Nature Reserve

Mt Annan Botanic Gardens

Leacock Regional Park

William Howe Regional Park

Bents Basin State Recreation Area

Bicentennial Park (Camden)

Chipping Norton Lakes

Regional Standard Sport Facilities

Kirkham Park Camden

Oran Motor Racing Circuit

Macarthur Regional Hockey Centre

Woodward Park and Whitlam Leisure Centre - Liverpool

Macarthur Regional Softball Centre

Campbelltown Stadium

Campbelltown Showground

Bicentennial Equestrian Park

Nepean River Cycleway

Ron Dine Memorial Reserve

NepeanRiver cycleway, skate park and bmx track

Source: Based on desktop review of Sydway Edition 8 (2006), Council webpage, and Council's Contributions Plan (2004).

Developed regional park opportunities for existing communities in South West Sydney are currently meeting demand, in terms of the quantum of open space provided. However an expanding population will place further stress on these existing parks and facilities. The South West Growth Centre urban footprint will decrease the current rural setting, and the resultant increased population will increase visitation to existing parks, detracting from the quality of the experience for existing residents.

The South West Sector Metropolitan Strategy Workshop discussion document¹ identifies gaps in the current provision of open space in South West Sydney, and in particular identifies a lack of facilities or poorly developed facilities in the existing regional open space areas (for example along the Georges River and William Howe Regional Park). The lack of facilities and amenities within the regional parks limit their functionality as quality, usable recreation resources.

The implications of this are that while the existing quantum of open space may satisfy demand, there is a need to improve the current facilities, access and amenities within existing areas. This option should be explored as a priority for improvement before more regional open space areas are designated. Existing studies also note the lack of transport links across the area to provide access to existing and future regional open space.

Of particular significance for the South West Growth Centre is the Western Sydney Parklands. The Parklands corridor comprises 5,500 ha of land stretching for 27 km from Blacktown, through Fairfield and Liverpool, to the northern edge of Leppington. It is intended to address regional open space, conservation and recreation needs in Western Sydney, and will contain a number of major metropolitan sporting facilities, public open space and recreation facilities for regional and local use and easements for a variety of public utilities. The Parklands will be divided into a 760 ha biodiversity corridor with fifty park areas in nine precincts that will provide passive recreation, tourism and heritage interpretation opportunities.

¹ Metro Open Space Team, DIPNR December 2004

3.4.2 District and local open space

Existing open space and recreation opportunities in the area surrounding the Oran Park site have been identified and examined to assess their availability and accessibility for the incoming population.

In summary, this assessment of has shown that:

- The quantum of open space available in the Camden Local Government Area is considered to be reasonably high based on current population levels. This is due in part to recreation resources provided on land prone to flooding, and on ecologically significant areas. However while the quantum of open space is adequate for the current population, much of it has not been embellished to provide quality functional spaces to meet the sporting and recreation needs of the population. There is an identified shortage of sporting facilities to satisfy current demand.
- The current supply of recreation facilities is largely located in the southern parts of the Camden Local Government Area in line with the urban growth of Camden. It is not anticipated that the existing district facilities would be able to accommodate the increased in demand from the projected population of Oran Park and Turner Road Precincts.
- Any existing capacity will be taken by other new release area developments currently under construction or planned in Camden.
- Council staff have indicated that there is increasing demand for more, well drained and appropriately located sporting fields, providing for a range of sports and with floodlighting and higher standard amenities.
- Services in the area for young people are already inadequate and the development may further contribute to this situation.
- There is an existing gap for a district level standard indoor sports venue to accommodate spectator events.
- Local level open space within each release area has been provided to meet local level needs only, and so will not have capacity or be readily accessible for the future Growth Centre population.

4 The Regional Context

Before community facility and open space requirements for the Oran Park Precinct can be identified, it is necessary to understand how the needs of the South West Growth Centre as a whole for facilities, services and open space will be met, and how the Oran Park Precinct might contribute to and complement the social infrastructure to be provided in the wider area.

A regional community facilities, human services and open space strategy which would identify regional requirements and the broad distribution of social infrastructure among the hierarchy of centres and the precincts has not yet been undertaken for the South West Growth Centre. Such a strategy needs to be prepared, based on sound population forecasts and development timeframes.

The study brief required that this study identify facilities of regional or metropolitan scale which may be suitable for delivery within either Oran Park or Turner Road Precincts. Strategies for facilitating the delivery of such facilities were also required to be briefly identified. Where regional level facilities are required but not proposed to be located within the Oran Park or Turner Road Precincts, the study was required to recommend their location elsewhere in the Growth Centre or wider region.

However, it has been beyond the scope of this study to prepare a comprehensive regional strategy for social infrastructure. This will require extensive involvement of and partnership amongst responsible agencies, including:

- both Camden and Liverpool Councils,
- adjacent LGA's (Campbelltown and Wollondilly)
- the GCC
- relevant state government agencies responsible for human services, arts and recreation, parks and conservation
- state and regional sporting organisations
- major non-government service providers.

Importantly, the development of a regional social infrastructure and open space strategy in partnership with these agencies would help engender a sense of ownership and commitment to the co-ordinated planning and delivery of social infrastructure and open space across the Growth Centre.

4.1 The South West Growth Centre and Structure Plan

Planning for the South West Growth Centre has envisaged 100,000 dwellings to be delivered over the next 25-30 years, resulting in a new population of about 250,000 to 300,000 residents. In addition, designated employment lands, together with commercial development within centres, are expected to generate substantial regional employment opportunities.

The structure plan for the South West Growth Centre proposes a hierarchy of centres to include:

- A major regional centre to be developed at Leppington;
- Eight secondary town centres, of which Oran Park is one;
- A number of precinct and neighbourhood centres, based on the creation of walkable neighbourhoods, the area within a 400 metre radius from local shops or another community focus. Walkable neighbourhoods are to be clustered around mixed use main street retail centres.

In addition, the structure plan has identified:

- land zoned for environment conservation
- land zoned for regional public recreation
- land zoned for local public recreation.

Consistent with its status as the major centre for the South West Growth Centre and its proposed high accessibility by bus and rail services, it is understood that Leppington is the preferred site for higher order facilities that will serve the whole Growth Centre population. Leppington will also need to contain district level facilities for its surrounding district catchment.

Oran Park will become the key secondary centre in the southern part of the Growth Centre. All of the other secondary centres identified in the Structure Plan will be much closer to Leppington, and will more readily complement it. Oran Park, by virtue of its distance from Leppington (about 10 kms), will become the anchor for services and facilities serving the whole southern third or so of the Growth Centre. In this way, while the future population of the Oran Park precinct itself will be about 25,000, the Oran Park Town Centre will need to contain facilities for the broader district catchment of up to about 90,000 people (although it is recognised it may take 20-30 years for this population to be reached).

4.2 Strategic and locational issues

This report does not assume that the South West Growth Centre will be entirely self-contained in terms of social infrastructure provision, and that planning can occur in isolation from the surrounding area. The planning of social infrastructure needs to recognise the broader regional context, and in particular the roles to be played by Liverpool city centre, Campbelltown city centre and the Camden / Narellan town centres, where major facilities serving the region and each of the local government area populations are already located. Issues for consideration and consultation with the three Councils and government agency stakeholders in considering regional social infrastructure needs include:

- What is Camden Council's preferred strategy for the distribution of major facilities and resources between Leppington, Oran Park and Camden / Narellan, particularly with regard to major civic, cultural and sporting facilities? Should major facilities serving the whole Camden population be concentrated in and around Camden town centre, as the identified civic "heart" of the LGA, or should they be divided between the two major centres? Such facilities have to date not been warranted by the relatively small population of Camden, but the anticipated development in the South West Growth Centre will trigger demand for a variety of higher level facilities. The extent to which these should be provided to meet the needs of the Camden population as a whole, or separately for the current and Growth Centre release areas, requires consideration. A related issue is whether existing facilities in Camden should be upgraded and augmented to serve the whole LGA, or new ones established in the Growth Centre precincts.
- More generally this raises the issue of Camden Council's approach to the development of a hierarchy of centres and its vision for the existing Camden and Narellan town centres. Should they be further developed as major centres to serve the Growth Centre population with sub-regional level facilities, or should such facilities be concentrated within Oran Park and Leppington, with the potential to undermine the role of the existing centres?
- Given that the Camden population in 25-30 years is expected to approach about 240,000 people, similar to Blacktown currently which is one of the largest local government areas in Australia (and not too different from Canberra, with its vast array of facilities and services), there would appear to be a need for an overall strategy for the LGA that could provide guidance to the development and distribution of

major facilities, services and open space resources for the Camden population as a whole.

- Similar issues arise for Liverpool Council, in relation to the potential for augmenting its civic and cultural facilities located within the city centre to serve the whole LGA and to reinforce its role as the "capital" of the Liverpool LGA, rather than distributing them between Liverpool and Leppington. This issue is particularly significant given the role of Liverpool as one of the five designated "cities" that make up the metropolitan area, and its associated need to develop the facilities and services associated with its "city" status.
- The location of the major centre at Leppington straddling the Camden / Liverpool LGA boundary further adds to these issues, as the two Councils may be reluctant to locate major facilities on the periphery of their area, particularly if these could undermine the growth and vitality of their established city centres. As outlined above, a process for the joint planning and delivery of social infrastructure within Leppington, involving both Councils, will be required.
- Campbelltown city centre has to date been the location for regional social and recreational facilities and services serving the Camden population. While this role may continue with regard to the southern established parts of Camden in the short term, in the longer term Camden will be large enough to justify its own services. The overall growth of the Camden population will have implications for the current arrangement of services delivered from Campbelltown.

These issues point to a need for consideration of 'centres strategies' within and between each of the affected councils, and for clarification of the proposed role of Leppington vis-à-vis the established centres in the wider Macarthur Region, before a comprehensive regional social infrastructure strategy for the South West Growth Centre can be developed.

Development of an overall strategy will be particularly important to avoid a pattern of incremental growth where significant needs beyond the immediate needs of individual precincts are ignored and opportunities lost for the creation of a hierarchy of centres with social infrastructure which are sustainable, vibrant and adequately meet the needs of their surrounding populations.

Development of an overall strategy will also need to take account of the fact that regional facilities in

the Leppington Regional Centre may not be developed for many years. In the meantime, this will place additional demand for regional level facilities and services on existing facilities in Camden, Campbelltown and Liverpool.

4.3 Regional social infrastructure requirements

In the interim, and based on initial consultations with state government agencies, the following distribution of major social infrastructure items is proposed within the South West Growth Centre. This will require consultation with both Camden and Liverpool Councils, and further consultation with government agencies, (based upon detailed population forecasts) before it becomes the basis of further precinct planning.

4.3.1 Health Services

Detailed planning is still required to confirm health needs. Capacity for emergency, acute in-patient and chronic care services are partly to be provided by the Liverpool Hospital Stage 2 redevelopment.

Other potential developments could include:

- Campbelltown Hospital to become a major metropolitan hospital;
- Dependent on population needs and future service models, an Integrated Health Centre could be appropriate for Leppington. Access to major commercial, public transport and parking facilities is important. Services that may be provided could include:
 - day and out-patient health services
 - primary care services for children, young people and adults
 - antenatal care
 - core community health services
 - community mental health services
 - satellite renal dialysis
 - health promotion such as diabetes education
 - diagnostic services (medical imaging and pathology)
 - minor surgical and endoscopic procedures
 - aged care and rehabilitation services
 - drug health services

Private health services, such as medical specialists and general practitioners, pharmacists, dentists, allied health services and imaging and pathology services are also part of the overall services provision.

- Development of community health services will be considered based on population needs. Oran Park would be a potential site. Good access to

public transport and parking again are important considerations. Services could include:

- dental
- speech pathology
- sexual assault
- child and family counselling
- health promotion
- child health nursing
- primary health nursing
- palliative care
- child development services
- podiatry
- youth services
- aboriginal health
- community mental health
- drug health and
- aged care and rehabilitation services

Capacity to co-locate with GP's and with allied health services would be an advantage, including other human service government agencies and non government services.

- At the local level, early childhood and outreach services may be delivered through local community facilities, along with primary health nursing clinics in schools.
- There will also be a need for community based services located close to local centres, including:
 - mental health group homes providing supported accommodation for people with mental illness,
 - mental health living skills centre,
 - family care cottages providing maternal and infant care and support,
 - specialist youth health services.
- There will also be a need for strategies to attract and retain private sector health services and for the co-location of public and private health services with local community facilities, schools and aged care services.
- In this regard, models of care in general practice service provision are changing rapidly. It is no longer prudent to expect market forces to attract the GP workforce required to service a growing population as demand emerges. A much more proactive philosophy will be required. Previous GP diffusion into growing population areas through isolated small practice cottage surgeries is not sustainable due to a number of factors including lifestyle expectations and financial imperatives. GP's are increasingly aggregating into larger multi-faceted practices offering the opportunity for

increased integration in care provision with government funded health services.

4.3.2 Education and Training

The University of Western Sydney operates six campuses in Western Sydney, the closest being at Campbelltown. The University has no plans to expand its number of campuses in response to population growth in the region. Instead, it plans to expand the number of places available at existing campuses in Campbelltown and Penrith. Given the huge costs associated with establishing a new university, current funding constraints within the university sector and the proximity of the UWS Campbelltown campus, it is unlikely that any other university would seek to establish a campus within the South West Growth Centre.

The Department of Education and Training has advised that in the short term, demand from the South West Growth Centre will be met through expansion of the four existing TAFE colleges in Liverpool and Campbelltown. In the longer term, as population thresholds are reached, one new TAFE college will be established within the South West Growth Centre. The trigger for this will be utilisation of all spare capacity within the existing colleges. This is expected to take some years, as there is considerable potential capacity at present. Moreover, there is a trend for students living in fringe areas to more readily study close to where they work, rather than where they live, such that population growth within the South West Growth centre may not directly translate into demand for local TAFE places.

A specific location for a new TAFE college within the growth centre is yet to be confirmed. The thresholds for provision are likely to occur much later than the development of Oran Park, suggesting that particularly in the short term, a TAFE college will not be warranted in Oran Park. Accessibility by public transport or location adjacent to a major local destination (shopping or employment centre) are important locational considerations for TAFE colleges. Planning will also need to take account of the future employment base and local industry profile of the area.

The distribution and location of public, Catholic and independent primary and high schools is an issue for consideration in detailed precinct planning, rather than the regional level.

The DET has provided preliminary advice that up to six specialist schools for students with special needs (such as intellectual or physical disabilities) will be required to meet the needs of the South West Growth Centre. The nature and locations of such schools are still to be determined.

4.3.3 Welfare and support services

Welfare and related services supporting individual and family well-being are provided by federal government (eg Centrelink, employment support, veterans services), by state government (eg Department of Community Services) and by a variety of non-government and community based organisations (eg Anglicare, Benevolent Society, St Vincent de Paul). Most of these services are currently provided to Camden residents from outlets in Campbelltown.

The development of the South West Growth Centre will give rise to a need for a wide range of welfare and support services, located in centres that are well served by public transport and clustered in close proximity to other human services and community facilities. At the regional and district level, such services are typically located in shop-front or commercial office premises. This is usually provided as commercially leased space, rather than being purpose built and owned by agencies.

The establishment, distribution and location of welfare and support services within the South West Growth Centre will require a detailed understanding of the likely growth pattern, demographic characteristics and needs of the future population. At this stage of the planning process, it is sufficient to ensure that space in commercially zoned areas will be available in all of the larger centres which would be suitable to accommodate welfare and support services. At the same time, this needs to recognise:

- many such services are not funded adequately for rent and cannot afford commercially leased accommodation, especially in appropriate locations. Subsidised accommodation in Council or other government premises may be required;
- there are advantages in co-locating a number of human services together in hubs, in terms of opportunities for integrated service delivery, synergies amongst related uses, convenience for common clients and efficient use of resources, such as training rooms and administrative support; and
- at the same time, it needs to be recognised that creating clusters of services for “at risk” groups can result in concentrations of disadvantaged people that can impact on the amenity, safety and image of a precinct.

The Department of Community Services has advised that its plan for servicing the South West Growth Centre is yet to be developed. It is unlikely that it will continue to service the Camden area from its Campbelltown Community Service Centre. Population growth is likely to reach the thresholds

for Camden LGA to have its own CSC. This could be located in Camden, Oran Park or Leppington. The Department generally leases commercial shop-front or office space for its CSC's, but new models may favour capital acquisition. There are benefits in being close to, or co-located with, a community health centre.

4.3.4 Aged care and disability services

Services to support older people and people with a disability fall into three broad categories:

- Services providing care for people living at home in the community (for example Home and Community Care Program services). Such services have been addressed above, included as individual and family support services. They will require affordable and well located service delivery / office accommodation in major centres close to public transport and parking. There are advantages in co-locating a number of such services, for instance in a HACC service centre.
- Services and activities requiring space in the community for older people and people with a disability to come together, such as respite daycare programs, lifelong learning activities and social / interest groups. These needs can generally be met through appropriately designed multi-purpose community centres.
- Residential care services for older people and people with a disability no longer able to live independently in their own homes or requiring supported accommodation in the community. Residential care facilities are provided by non-government and private sector organisations, usually with recurrent funding and licensing of places provided by Commonwealth and State Government agencies. Such places are allocated according to planning benchmarks. For aged care services, these currently aim to provide 48 low care (hostel) places, 40 high care (nursing home) places, and 20 community care packages, per 1000 people aged 70+. Accordingly, the need for residential care facilities within the South West Growth Centre will reflect the age profile of the population, and cannot be determined at this stage of the planning process. Similarly, the need for disability group homes is difficult to ascertain at this stage of the planning process.

Residential care facilities are permitted uses within residential neighbourhoods (in keeping with the principle of integrating, rather than segregating older people and people with a disability) and so may be provided within any of the South West Growth Centre precincts, without the need to

identify sites at this stage. However, facilities need to provide ready access to shops, services and public transport, and so should be located close to district and neighbourhood centres.

A further key issue for residential care facilities (and retirement housing more generally) is the high cost of land in suitable locations that provide good access to services, facilities and public transport. As a result, residential care facilities are often forced to locate on the urban fringe, with the risk that older people will be isolated from mainstream community life. It will be important that sites for residential care facilities that are suitably located are identified as planning for the South West Growth Centre continues.

It should be noted that most of the accommodation needs of older people and people with a disability can be met through well designed and located self-care housing that allows them to live independently within the community, and that less than 10% of people in these groups will seek entry to residential care facilities providing supported accommodation. This reinforces the importance of encouraging a mix of housing types and sizes in each neighbourhood, in order to provide housing choice for older people and people with a disability.

4.3.5 Civic and cultural facilities

These include libraries, exhibition space, performing arts space, and spaces for community arts activities. They also include spaces for meeting, gathering, and cultural activities, including a civic hall, meeting and activity rooms and outdoor space such as town square or amphitheatre. A branch office to promote access to local government services may also be required.

As outlined above, the distribution of major civic and cultural facilities to meet the needs of the South West Growth Centre population requires joint consideration by Camden and Liverpool Councils, particularly in relation to the role they envisage for their city centres and their city-wide facilities, and the capacity for joint planning of facilities to be located in the Leppington regional centre.

In the interim, at an indicative level and considering the South West Growth Centre as a more or less self-contained development area, the following facilities are likely to be required for a population of 250-300,000 people:

- Subregional level:
 - a major regional level library
 - regional performing arts space for music, dance, theatre
 - regional gallery / exhibition space

- indoor and outdoor civic spaces suitable for large functions, events and gatherings.
- District level facilities for a catchment of about 50,000 people:
 - branch library
 - district performing arts and exhibition space
 - meeting and function space
 - workshop spaces for community arts activities
 - these functions may be co-located within a single district level cultural and recreation facility
 - spaces for outdoor cultural events (concerts, cinema, markets), such as in town square, plaza, outdoor amphitheatre.
- Neighbourhood level facilities. Larger neighbourhood community centres should be designed to enable local cultural activities, including, for instance, kids dance classes, community arts and craft activities, meetings of local interest groups. School halls, particularly at high schools, may also be used as local level performance venues. Spaces in the public domain, including parks and village squares, will be required for local outdoor cultural activities.

It is noted that Camden Council currently has two libraries for a population of about 50,000 people. Continuing the same level of provision across the South West Growth Centre would result in an unsustainable number of small facilities. Consideration may need to be given to providing a smaller number of larger facilities in the Growth Centre precincts.

4.3.6 Legal, police and emergency services

The Attorney General's Department has advised that an additional court house may need to be provided in the South West Growth Centre, with such a facility likely to be located in Leppington.

For police services, at this stage future provision across the Growth Centre has not been determined. A Working Party has recently been established to consider planning for the Growth Centre. It is likely that a new police station would be established at Leppington, in conjunction with a courthouse. It is not currently anticipated that a new police station would be established in Oran Park, although the overall increase in population within Camden will warrant new facilities somewhere at some stage.

Similarly, ambulance and fire services are yet to develop a strategy for servicing the Growth Centre.

The locational requirements of safety and emergency services are based upon their ability to achieve time targets in responding to emergency situations, a function of travel times and the road layout, rather than population numbers or densities. Accordingly, these agencies are only able to identify particular site requirements once the road network has been determined. In the meantime, broad locational criteria include:

- sites which provide ready access to the road network, i.e. proximity to major roads, not in places that may have traffic congestion around them,
- sites which provide ready access to commercial and residential areas. The interface between commercial and residential areas may be suitable,
- sites which minimise noise impacts on residential areas,
- sites which are large enough to accommodate garaging and maintenance of vehicles, and allow for some expansion as needs grow.

4.3.7 Entertainment and leisure facilities

A wide variety of entertainment and leisure services and facilities will be required to support the lifestyle needs of future residents. These may include clubs, cinemas, restaurants, and pubs, i.e. commercial facilities provided by private sector operators. These will be provided in commercial and mixed use centres across the Growth Centre, according to demand and feasibility assessments. It is likely that the greatest range and concentration of such facilities will be developed within the Leppington regional centre, with more limited facilities distributed across the various secondary centres.

4.4 Regional open space and recreation requirements

4.4.1 Regional open space

Regional open space provision is generally the responsibility of state governments, but some council owned and managed sites can play a regional role. Regional open space generally consists of extensive natural, historic or cultural land areas and/or significant concentrations of sporting facilities, particularly with regional competition or training capacity. Such facilities or resources should generally have good transport access and infrastructure to cope with substantial visitor numbers.

There are no definitive standards for provision of regional open space for Sydney. ParksVictoria has determined after extensive survey of visitor

catchments and willingness to travel modelling that having seven regional parks within 15km drive is considered a good level of access for Melbourne residents. Testing the applicability of the ParksVictoria benchmark in Sydney has not been finalised. But as an indication, there are eight parks with a potentially regional catchment within 15 kms of the study area. In addition there are regional sports facilities which attract users from outside the local area and provide for regional and national events.

As outlined in the previous chapter, it is proposed that the Western Sydney Parklands will provide the primary regional open space area for the South West Growth Centre. Several smaller areas of regional open space have also been identified in the Structure Plan. None of these are located with the Oran Park or Turner Road Precincts.

Stage One of the Western Sydney Parklands project will be undertaken over ten years, with a \$15 million capital works project in Liverpool proposed to include:

- \$3m for a multi-purpose pathway through Liverpool
- \$2m for bushland restoration
- \$5m for regional sport facilities and programs, proposed for Leppington
- \$5m for regional picnic and playgrounds.

Whilst this is a significant government investment in open space, it will not negate the need for local and district level open space or district recreation facilities to service the Oran Park and Turner Road Precinct populations. Moreover, the \$5m identified in the budget for regional sport facilities will not be sufficient to develop a regional recreation facility. As an indication, the Blacktown Leisure Centre, which is a regional facility for the North West sector, cost in the order of \$16.7m in 2003.

It is also acknowledged by DOP that direct access to the Western Sydney Parklands from the South West Growth Centre is limited by topography and security fencing to the Upper Water Supply Channel. A buffer will be required between the residential areas and the Channel. The two critical access points will be at West Hoxton Park near Cowpasture Road and Cecil Park/Kemps Creek. The urban footprint of the Growth Centre will need to respond to these opportunities. The most southern section of the Parklands will be at Leppington and therefore consideration of 'off road' links to this Parkland from Oran Park Town Centre should be considered.

As discussed above, there is a need for an integrated regional open space strategy to satisfy the open space demand for the total South West Growth Centre. The regional strategic plan would ensure an adequate supply of active and passive open space for the region which is planned in

relation to the identified conservation areas and the existing natural setting. The cross boundary nature of the Growth Centre requires that local government forums and planning groups be established to discuss proposals for new facilities, address cross boundary issues and to guide regional level planning. A regional plan is needed to establish a common system of open space classification, and common standards for provision, which will assist cross boundary planning. For a regional sport and recreation facility to be developed at Leppington, both Camden and Liverpool and the adjoining councils will need to be involved. The forum could also be used to develop agreements between councils for shared provision of facilities.

Without a strategic approach to the planning of open space in the South West Sector, an incremental approach based on individual developments will result in duplication of smaller facilities and parks which provide limited social, economic or environmental benefit, and a potential lack of provision for the higher order and more specialist facilities required to serve larger district catchment populations. A hierarchy of facilities and open space areas needs to be provided across the Growth Centre so that each precinct will have a unique recreation facility, either in design or characteristic. These facilities, together, will provide complementary, rather than identical, functions. The unique nature of each is intended to attract a wider range of users and increase the opportunities for social interaction between new residents, while also providing opportunities for participation and involvement with the existing population.

The proposed staging of Growth Centre development over a thirty year time frame allows for appropriately located sites to be designated and larger leisure facilities to be built in stages as the population numbers increase. The total projected resident population, together with the existing residents of Camden, will create a critical population threshold to ensure that the following facilities are economically feasible.

Regional and District Leisure Facilities for Consideration within the SW Growth Centre

Facility	Objective	Timeframe	Types of Facilities proposed	Locational criteria
Regional Park	Western Sydney Parklands Focus for community events.	Ongoing	Picnic, social gathering for community events modelled on Centennial Park	Leppington already designated as location for the SW Growth Centre, inclusions and funding dependent on regional recreation strategy.
Leppington Sport Stadium	Provide focus for competitive sport and entertainment on a regional basis.	10-15 years	Outdoor Stadium with seating up to 35,000; this may be in two stages as population increases.	Close to public transport, lighting and noise buffers required. Adjacent to Leppington Regional Centre.
Oran Park District Sport and Leisure Centre	Community recreation, sport and lifestyle programs <ul style="list-style-type: none"> • Aquatic facility with leisure pool, teaching pool and outdoor pools. • Indoor recreation centre: 2 court hall with provision for additional 2 courts once population is established. • BMX track • Sports oval with grandstand for regional school/ junior sporting competition • Athletics track may be located around the oval • STP pitches (x6) for training with floodlights • Netball courts (x 12) • Fitness Centre • Dance/Yoga/Pilates activity room • Wellness/massage/consultation • Martial arts space • Cafe • Shop • Crèche facilities for users 	5-10 years	Provide free form leisure pool, 4 court hall and fitness centre, climbing wall and acoustic treatment and access for events and Provided earlier in the development to act as an 'attractor' grandstand capacity needs additional research to determine media/ entertainment requirements STP pitches may be staged Netball courts may be staged Bike storage and lockers May be collocated with retail Health and entertainment,	Near main roads, Accessible by public transport, pedestrian and bicycle. start with hall and phase developments in line with population increase. Allow land for expansion of facilities as SWGC develops
Specialist Facilities	Consideration should be given to specialist facilities which may be provided by other service providers or commercial operators Eg. <ul style="list-style-type: none"> • Tennis Centre (12-16courts) • Lawn Bowls • Golf driving range (may be provided in conjunction golf course) • Ice rink • Fitness Centre • Gymnastics Centre • Climbing Wall • Skate park • Extreme Sports Park 	10-15 years	These are based on population numbers only and existing provision. Additional feasibility and consultation with sporting bodies is necessary to determine financial viability and alternative sources of funding	Based on financial feasibility studies.
Parks/ play spaces	District and local parks and sporting facilities are described in Chapter 7			

5 Population Forecasts for the Oran Park Precinct

5.1 Development scenario

The Growth Centres Commission has established indicative development parameters for the Oran Park Precinct, based upon a target yield of 8,300 dwellings. The target dwelling mix is as follows:

Dwelling density	% Target	Number of dwellings
High density	6%	498
Medium density	30%	2490
Low density	64%	5312
Total	100%	8300

The structure plan for the Oran Park Precinct also makes provision for approximately 45,000 sqm of retail space, 5,000 sqm of office space and a further 15 ha of employment lands.

The draft Indicative Layout Plan for the Oran Park Precinct prepared on behalf of the landowners proposes:

- 5,554 dwellings in the Landcom GDC lands on the eastern side of The Northern Road,
- 161 dwellings in the small landholdings on the eastern side of The Northern Road,
- 1,902 dwellings on the western side of The Northern Road (the Mirvac McIntosh lands),
- A **total of 7,617 dwellings**.

The difference between the GCC targets and draft ILP yields reflects the identification of constraints to the developable area identified through detailed site assessment. This study has prepared demographic forecasts and identified social infrastructure and open space requirements based upon the draft ILP yields.

5.2 Estimated occupancy rates

In determining the most appropriate occupancy rates to be applied in the Oran Park and Turner Road Precincts, average occupancy rates and trends in household size in new release areas in South West Sydney and in the metropolitan area as a whole have been examined in some detail. This has included examination of ABS 2001 Census

material and additional data from PlanningNSW prepared by MacroPlan Australia for the Structure Planning Workshop for the South West Growth Area in May 2003.

At the metropolitan level, key issues include:

- Average household size has declined from around 3.5 persons per dwelling in the 1950's to 2.7 persons per dwelling in 2001.
- Average household size is expected to continue to fall to about 2.36 persons per dwelling by 2031. This reflects general demographic trends across Australia for smaller households and declining occupancy rates, associated with:
 - Lower fertility rates and increasing numbers of people choosing not to have any children
 - The increasing age at which people do have children
 - Increasing numbers of people choosing to live alone
 - Rates of relationship breakdown, creating different household configurations
 - The ageing of the population, increasing life expectancy and growing numbers of people in the oldest age cohorts.

In the new nine release areas in South West Sydney for which 2001 data was analysed in the MacroPlan Australia study:

- Average household size ranged from 3.19 persons in Currans Hill to 3.93 in Cecil Hills, with an average of 3.43 persons. The high average household size reflects the predominance of detached dwellings and young family households in the release areas. These figures compare with 3.3 persons in Liverpool, 3.2 in Campbelltown and 3.1 in Camden LGA's.
- In 2001, occupancy rates for semi-detached, terrace or townhouses were 2.7 persons in Liverpool, 2.6 in Campbelltown and 1.9 in Camden, compared with a metropolitan average of 2.4 persons.
- At the same time, attached and semi-detached dwellings in the nine South West Sydney release areas had an average household size of 2.9 persons, considerably higher than the Sydney average, indicating that many of these dwellings are occupied by families. Occupancy rates ranged from 2.4 persons in Prestons to 3.4 persons in Horningsea Park. It should be noted that the number of medium density dwellings in most release areas is quite small and this accounts partly for the fluctuating occupancy rates.

- There are almost no apartments in new release areas to provide an accurate indication of occupancy rates. In the South West Sydney LGA's in 2001, occupancy rates for apartments were 2.3 persons per dwelling in Liverpool, 1.6 persons in Campbelltown and 1.5 in Camden. This compares with 1.8 persons for apartments in the Macarthur region, and 1.9 persons for Sydney as a whole.

Further issues include:

- Consideration needs to be given to how occupancy rates vary over the life of a development. Where new release areas are occupied by first home buyers, typically occupancy rates in the initial period of settlement are relatively low, but escalate quickly as families grow. In such areas, average household size could be expected to peak at around 10 years after first settlement. Where release areas are settled predominantly by second and subsequent home buyers, families tend to be complete at the time of settlement and occupancy rates remain fairly stable until households move into the next life cycle stage.
- Occupancy rates for release areas in south west Sydney settled since 1991 were examined at the 1996 and 2001 Censuses. Occupancy rates remained fairly stable for both detached and attached dwellings (3.44 and 3.48 for detached houses, 2.93 and 2.93 for attached dwellings), showing an almost identical average household size over the 5 year period. This suggests that these areas have been settled by completed families, and that these areas are, at least in the short term, going against wider trends for declining household size.
- WSROC analysis of occupancy levels for different types of dwellings across Western Sydney shows that different trends are occurring for different dwelling types. Occupancy levels for detached houses have fallen consistently across the region over the last decade in line with general trends in Australia. However, the picture is different for higher density housing. Over the same period, occupancy rates have increased for attached dwellings and flats in areas with a substantial proportion of such stock in Western Sydney. It is not clear whether these findings imply increased overcrowding of higher density stock, or simply the development of more large flats accommodating larger households, and a greater tendency for families with children to occupy such housing forms.

Taking into account all of the above, for the purposes of this study, the following average occupancy rates for the different dwelling types

are proposed. These rates assume completed households (i.e. about 5 years after occupation).

Table 3: Proposed Occupancy Rates

Dwelling type	Average household size
Detached dwellings	3.3 persons
Attached dwellings, semi-detached	2.9 persons
Apartment	1.8 persons

It is recognised that the proposed occupancy rates are relatively high compared to those currently being achieved across Sydney as a whole and those projected to occur in Sydney in the future, given national trends for declining household size. However, they are based on an assumption that the South West Growth Centre precincts will continue to attract the types of households that have been attracted to other recent developments in the surrounding area, predominantly families with children. As occupancy rates in the surrounding release areas have been relatively stable over the last two census periods, it is assumed that they will continue into the foreseeable future. Allowance has been made for smaller and non-family households to occupy some of the attached dwellings and apartments, in line with current experience.

Clearly it is difficult to predict average household size for a development that will take 15-20 years to complete, given current trends. Using the occupancy rates above is considered likely to generate population projections at the upper levels of probability or maximum end of the spectrum, as it is unlikely that occupancy rates would exceed those currently being achieved, given national trends. These occupancy rates also assume completed families, and so will over-estimate where households are not yet complete. Should the projections over-estimate population needs, requirements for social infrastructure can readily be scaled back. By contrast, if population numbers are under-estimated, it can be much more difficult later to find sites and finance to make up the shortfall.

5.3 Projected population numbers

When the assumed occupancy rates are applied to the development targets outlined above, the anticipated size of the future population is as follows:

Table 4: Forecast population size

Type of dwelling	Number of dwellings	Occupancy Rate	Number of People
Apartment	696	1.8 persons	1,253
Attached	2,344	2.9 persons	6,798
Detached	4,577	3.3 persons	15,104
Total	7,617	av 3.04	23,155

This table suggests that the Oran Park Precinct, at completion, would have a population of about 23,155 people. For the sake of simplicity, it is proposed that these figures be rounded off as follows:

- assumed yield of 7,600 dwellings,
- occupancy rate of 3.04 persons per dwelling and
- population of 23,100 people.

5.4 Age and household characteristics

Anticipating the age and household characteristics of the future population of the South West Growth Centre recognises:

- recent and current demographic trends in new release areas in South West Sydney, which are likely to continue, given similar housing conditions;
- the future release areas will contain a greater mix and wider range of dwelling types than recent new release areas in South West Sydney in order to meet the objectives of the Metropolitan Strategy;
- housing preferences for different types of households are in a state of flux, as medium density forms become popular with and more affordable to a wider range of households;
- there is no simple direct causal relationship between dwelling types and occupying household types. Analysis of housing occupancy in Western Sydney by the Department of Planning from the last Census shows that more than half of the people living in medium density housing are families with children. At the same time, the majority of couples without children and people living alone are living in detached houses.

Forecasting the household composition and age profile of the component of the South West Growth Centre population that will comprise detached dwellings is relatively straightforward, given the experience of other release areas in

south western Sydney in recent years. Analysis of their populations shows:

- The predominant household type was a couple family with young children
- The median age in the new release areas was 28 years (range 27-32), compared with 34 for Sydney as a whole. Children (0-14 years) made up 29% of the population, compared with 20% in Sydney as a whole
- 35% of residents were born overseas, (compared with 31% for Sydney as a whole)
- An average of 17% of households were renting their dwelling, compared with 29% for Sydney as a whole
- Demand for housing in the South West Sydney release areas was predominantly driven by residents already living in the southern parts of Sydney, and by overseas migrants.

The age profile of the future population will reflect the affordability of housing. There is some slight variation in the age cohort peaks according to the general price market of the estate, with first home buyer estates having slightly younger parents (25-34 years) and a higher proportion of children aged 0-4. Release areas settled by families who are second and subsequent home buyers show the peaks in the age distribution slightly older, with a higher proportion of adults in their 30's and early 40's and primary school aged children.

Comparison of the age profiles in new and older release areas in South West Sydney (refer Tables 2 and 3, Appendix 4) indicates that as the release areas mature, the population ages, with the proportion of young children 0-4 years declining in the older release areas as the proportion of primary and secondary school age children grows. Of particular note are the relatively low proportions of people aged 55+ in both new and older release areas, compared with the wider area and Sydney as a whole.

Given the on-going demand for detached family housing in the South West Growth Area, it is considered likely that the detached dwellings will continue to appeal predominantly to families with children, most of whom are likely to be second and subsequent home buyers, given likely price considerations and current affordability issues. This means that the families are more likely to be completed, and have a considerable proportion of primary and secondary school age children.

In terms of forecasting the age and household characteristics of households in the medium density forms of housing to be provided within the South West Growth Centre, there has been limited experience of medium density dwelling forms in other new release areas in south western Sydney upon which to develop forecasts. The following issues have been identified in considering the

household types likely to be attracted to smaller lot, semi-detached and attached dwellings and apartments in the South West Growth Centre:

- Several new release areas in south west Sydney (Prestons, Horningsea Park and Casula), have a reasonable proportion of semi-detached or attached stock (up to 27% in Horningsea Park). However, the age and household profile of these areas from the 2001 Census is the same as other nearby areas comprised entirely of detached dwellings, suggesting there is little difference in the types of household occupying the different dwelling forms, and that the smaller and attached dwellings are also being occupied by young families with children, as well as by couples without children.
- The Department of Education and Training has analysed 2001 Census data for Liverpool and Campbelltown LGAs to explore the relationship between age of children, dwelling type and number of bedrooms. This analysis shows that there are considerable numbers of children of all ages living in attached dwellings and flats in the area, and that it is the number of bedrooms in a dwelling, rather than the type of dwelling, which will determine whether a dwelling is occupied by a family with children or not.
- The proportion of children living in attached dwellings and flats with 3 or 4 bedrooms is on average just as high as the proportion of children living in detached dwellings of the same size. This holds true for pre-school, primary and secondary aged children. In other words, families with children of all ages are likely to occupy attached dwellings and apartments if they have 3 or more bedrooms. Two bedroom dwellings are less likely to be occupied by families with children, whether they are detached dwellings or medium density forms. This suggests that the lower occupancy rates associated with medium density forms are more a reflection that medium density dwellings are on average smaller, rather than that this form of housing does not appeal to families with children.
- Macarthur Region councils have identified a growing need for medium density forms of housing for:
 - Smaller households, including single parent families and couples without children,
 - Low income families requiring rental accommodation,
 - Single adults of all ages;
 - Group households;
 - Empty nesters looking to downsize; and
 - Older people requiring more manageable and adaptable housing.

- Given trends in housing affordability in the area, detached dwellings are increasingly beyond the price range of first home buyers. In this context, medium density dwellings are providing a more affordable alternative for families unable to afford a detached dwelling. Accordingly it is likely that a significant proportion of the medium density dwellings will be occupied by first home buyers, comprising young couples initially without children or with young children.
- Based on experience in the wider area, more than half the medium density forms of housing are likely to provide rental accommodation. Tenant households are most likely to comprise:
 - Low income families, including single parent families
 - Students and young people in group households
 - Young couples
 - Single people of all ages.

The relatively high proportion of rental accommodation in the release area is likely to result in a higher rate of population turnover than is characteristic for new release areas and this will influence the ageing pattern of the population.

It has been suggested that the development of significant numbers of apartments and townhouses might attract large numbers of older people and empty nesters to the South West Growth Centre, given the ageing of the population in the Macarthur Region and the shortage of suitably designed housing for older people in the district. Development of the South West Growth Centre presents an opportunity to increase the stock of housing suited to the needs of older people, including smaller, more manageable dwelling forms, adaptable housing or SEPP 5 type developments. The extent to which older people do move to the South West Growth Centre will in part be a function of the availability of such housing.

However, it will also be a function of the development of services and facilities provided to meet the needs of older people, including shops, personal and commercial services, health services, leisure and recreation opportunities, and public transport. Older people are conspicuously absent in significant numbers in most new release areas. This reflects in part the fact that housing forms suited to their needs are not usually provided, but also the fact that older people, if they do move, generally do so to areas that are familiar to them, close to family and friends, familiar shops, a high level of services and good public transport. They tend not to be pioneers in new areas that typically

lack services and transport in the early days of settlement. For these reasons, it is considered unlikely that the South West Growth Centre will attract significant numbers of older people until the town centres have become established and services and public transport are in place. A small proportion of older people will, however, seek to relocate to the new release areas to be close to their children and grandchildren, regardless of the level and timing of service provision. Providing housing choice to meet inter-generational needs will be an important consideration.

The extent to which Oran Park and Turner Road attract significant numbers of younger people, in group or single person households, will also depend in part on the development and timing of services and facilities to attract them, as well as the affordability of housing. This includes access to town centre entertainment and leisure facilities (cinemas, restaurants), public transport, employment opportunities and tertiary education.

Given the above considerations, it is likely that the smaller and medium density dwellings (small lot / semi-detached, townhouses and apartments) in Oran Park and Turner Road Precincts will appeal to a variety of age and household types and will create greater diversity in the population profile than has characterized new release areas to date. In addition, a much higher proportion of the housing stock is likely to be purchased by investors and available as rental accommodation, and this will add to the diversity of household types. Assuming that a reasonable proportion of the medium density dwellings will contain 3 or more bedrooms, it is anticipated that medium density housing forms in Oran Park and Turner Road Precincts will be occupied by the following types of households:

- First home buyers comprising young couples without children and families with 1 or 2 young children, for whom medium density housing is more affordable than detached dwellings,
- Families from linguistically and culturally diverse backgrounds, who have demonstrated a greater preparedness to live in medium density housing forms,
- Single parents with children of varying ages, requiring smaller, more manageable and more affordable accommodation,
- Low income families requiring rental accommodation,
- Young couples renting prior to home purchase,
- Single adults of all ages,
- Group households comprising young adults,
- Empty nesters and older people looking to downsize, initially in small numbers but

increasing as the town centre facilities develop.

At this stage of the planning process, it is difficult to predict what proportion of the total population each of these household types will comprise, and therefore unrealistic to try to prepare age cohort profiles for the precincts.

In summary, it is anticipated that the precincts will be characterised by:

- Initially a comparable proportion of young couples and families with children to other release areas in the region, but a greater range of family types, reflecting the wider range of housing types and price markets to be provided.
- It is anticipated that the proportions of empty nesters and older people will be initially similar to that usually experienced in new release areas, but, given the differing housing stock, will rapidly increase to approximate those in the wider district once services and public transport become well established.
- Over time, the peaks in the age distribution associated with a predominance of young families will reduce and the population will become more diverse. Increasing proportions of young adults and older people will be attracted to the area once the town centre facilities are established.
- The proportion of the population who are young children and young adults will decline as the population ages and the proportion of older children with older parents grows. The proportion of the population aged 55+ will also increase considerably as the area matures.
- Owner occupiers are likely to provide a stable group that will age in place through the life cycle stages, while tenant households will experience greater turnover, thereby maintaining a similar age profile as in the initial stages.
- In this way, over time the population profile is likely to come to more closely approximate that of an established area with a variety of age and household characteristics, rather than a traditional new release area with particular age concentrations.

Forecasts of the ethnic make-up of the population have not been attempted, as these are notoriously unreliable over such an extended timeframe and have little bearing on the broad nature of facilities proposed at this stage. The Macarthur area is likely to continue to be an area of significant

cultural diversity, although this is less marked in Camden LGA.

Demographic, cultural and lifestyle patterns are changing rapidly, and will continue to change over the life of the development. The relative uncertainty about the future composition of the population and its precise needs gives rise to a need to plan for flexibility in facilities and open space, to enable them to respond and adapt as the particular requirements and lifestyle preferences of the population are ascertained, whether these be associated with life cycle stage, income, ethnicity or any other characteristic.

5.5 Socio-economic characteristics

In the 2001 Census, the new release areas of South West Sydney had an average household income of \$74,000, compared with the Sydney average of \$56,000 (i.e. 32% higher). Average household incomes ranged from \$68,000 in Prestons, to \$81,500 in Harrington Park, to \$110,000 in Macquarie Links. Release areas in South West Sydney have become increasingly unaffordable for first home buyers and are now dominated by second and subsequent home buyers, as reflected in these household income figures. There are also increasing numbers of people from higher occupational status groups such as managers, professionals and administrators moving to release areas in the south west, helping to redress the previous low representation of such groups in the population of the wider region.

The relatively high household income characteristic of recent release areas in South West Sydney is also associated with very high rates of workforce participation. This suggests it is in part based on two parents having to work to finance large mortgages, rather than high individual incomes. This in turn can be linked to relatively high levels of household and financial stress, rather than high socio-economic status.

As outlined above, the greater mix of housing forms proposed for Oran Park and Turner Road will provide a range of housing choices catering to a greater variety of sub-markets and result in a greater population diversity than has characterised other nearby release areas. While the detached dwellings are likely to continue to accommodate households with above average incomes and occupational status, the provision of smaller and medium density forms of housing will provide more affordable opportunities for first home buyers and lower income families. Importantly, the South West Growth Centre, with its higher proportion of medium density housing, is also likely to provide a significant stock of rental

accommodation, resulting in a much higher degree of socio-economic diversity than characterises most release areas.

5.6 Growth rate and development staging

At this stage, development assumptions for Oran Park and Turner Road include:

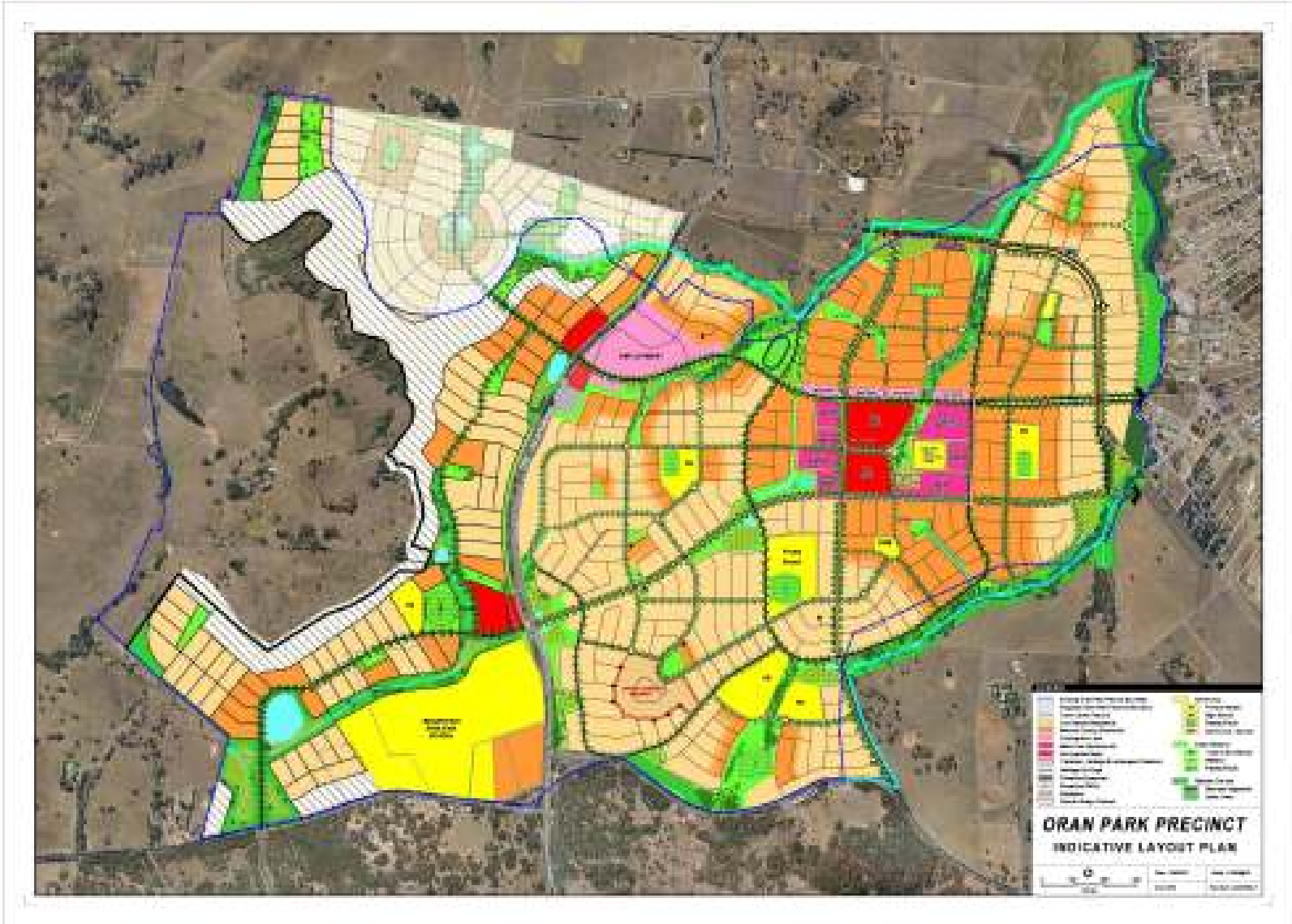
- Sales of land will commence in the last quarter of the calendar year 2008
- Occupancy of dwellings will commence in the second half of the calendar year 2009
- Development rates will commence with about 200 dwellings and build up in the initial years to reach a maximum of 800 dwellings per annum. They will then tail off over the final years
- For modelling purposes, it has been assumed that approximately 50% of dwellings will typically be occupied within the year of lot purchase, with the remaining 50% to be occupied in the following year. Development in the Oran Park Precinct is likely to extend over a period of about 15 years through to 2023.

Indicative rates of population growth are indicated in Table 4, Appendix 4. This has adopted the average occupancy rate across the whole development of 3.04 persons per dwelling, rather than try to accommodate the different dwelling mixes and occupancy rates.

5.7 Employment Population Projections

At this stage, it is anticipated that employment opportunities within Oran Park and Turner Road Precincts will be as follows:

- Oran Park Precinct:
 - 1,800 retail jobs within the town centre
 - 250 office jobs within the town centre
 - 300 jobs within employment lands on The Northern Road
- Turner Road Precinct:
 - 1,600 jobs in employment lands
 - 200 jobs in local retail centre.



6 Community Facility Requirements

This chapter identifies likely requirements for community facilities and human services for the Oran Park Precinct, based upon:

- The demographic forecasts outlined in the previous chapter;
- The benchmarks and thresholds identified by government agencies, and
- The anticipated needs and preferences of the future population.

6.1 Defining the catchment population

As outlined above, the Oran Park Precinct is anticipated to have a dwelling yield, at completion, of about 7,600 dwellings and population of about 23,100 people. It will also have, at completion, an employment population of about 2,300 jobs. Facilities and services will be required within this precinct to meet the local level needs of both the residential and employment populations.

The potential impact of The Northern Road as a barrier to accessing local level facilities on the opposite side will need to be taken into consideration. As outlined in the previous chapter, development on the western side of The Northern Road has a target of about 1,900 dwellings, while that on the eastern side has a target of about 5,700 dwellings. However, the two components need to be considered together for planning purposes.

The Oran Park town centre will also be the centre for the surrounding district. In the short term this will include the Turner Road Precinct, bringing the combined Oran Park and Turner Road catchment population to around 35,500 people at completion in about 15-20 years. In the longer term, Oran Park will also provide the district centre serving the Catherine Field and Maryland Precincts, a further 18,000 lots or 55,000 people. This would, in 20-30 years, make Oran Park the major centre for a catchment of about 90,000 people.

It is unrealistic to plan facilities and services at this stage for a population of this size which will not eventuate for several decades. The Oran Park town centre will need to develop and evolve gradually as population within its catchment grows. However, planning at this stage does need to take account of the development projections for the immediate catchment area, which is considered to be the whole of the Oran Park

Precinct and the associated Turner Road Precinct (ie 35,500 people).

6.2 Location, spatial and design criteria

General principles for the design and location of sustainable social infrastructure have been outlined in Chapter 2 (section 2.6). Additional locational criteria include:

- the need for an equitable spread of social infrastructure, open space and recreation and sport facilities, giving consideration to hierarchy levels and desired catchments;
- the capacity of any existing social infrastructure and open space to cater for parts of the new population;
- the potential connections between social infrastructure, open space and facilities, including the potential to establish activity and service hubs and link to unique open space features;
- the topography of the development, proposed main road systems and potential barriers that could impact on access and connections;
- the arrangement of neighbourhoods and centres, including links to schools, commercial centres and other facilities;
- opportunities for co-location and shared use to make efficient use of land resources.

Specific location, spatial and design requirements are identified below in relation to each type of facility.

6.3 The Draft ILP for Oran Park

A revised draft Indicative Layout Plan for the Oran Park Precinct was issued to specialist consultants in February 2007. This Plan addressed some, but not all, of the issues identified in our draft report submitted to the GCC in January 2007. Since the revised draft ILP was issued, it is understood that master planning has continued and that some of the issues previously identified have now been addressed, and substantial progress has been made in addressing others. However, to date a new revised ILP has not been issued which reflects these changes. Our discussion of the draft ILP in this report therefore relates to the version issued to consultants in February 2007, even though we are aware planning has evolved since then.

In terms of community facilities and human services, the draft ILP for the Oran Park Precinct (provided on the previous page) provides for:

- A town centre with extensive retail / commercial and mixed use areas, together with 2 local neighbourhood retail centres on the western side of The Northern Road and a small retail component on the eastern side of The Northern Road adjacent to the employment lands.
- Schools:
 - Four public primary schools, with three on the eastern side of The Northern Road and one on the western side,
 - One government high school in the southern part of the precinct,
 - A private (Catholic) school campus, to include both primary and high school,
 - The existing Macarthur Anglican College.
- Local community facilities:
 - Two sites identified for community uses. These are both stand alone sites in the midst of residential areas on the eastern side of the precinct.
- District services and facilities: Sites within the town centre have been identified for:
 - a district community centre
 - a library
 - a cultural and civic centre
 - a court house and police station
 - other civic uses
 - a possible TAFE college.

6.4 Requirements for community facilities

6.4.1 Education facilities

The DET guidelines for the provision of schools in areas of new residential development are:

- One public primary school per 1,500 to 2,000 new dwellings,
- One public high school per 4,500 to 6,000 dwellings,
- Provision and timing of new schools takes account of a number of other factors, including capacity of schools in adjacent areas, the housing mix and demographic profile of new residents and likely pattern of demand for private schools,
- Primary schools require a site area of approx. 3 ha. There is little scope to reduce this until precise demand can be assessed, as a site of this size is required to carry demountable classrooms through peaks in demand. There may be opportunities to vary the site size later as detailed planning occurs

in response to specific sites and if joint use of facilities can be negotiated,

- High schools require a site of approximately 6 ha, although there is some scope to reduce this if schools are co-located with community sporting fields.

Locational guidelines for DET schools include:

- The school should be on a distributor or collector road for ready access, but not on a sub-arterial or arterial road, to minimise noise and traffic safety problems
- For primary schools, the school should be central to its catchment, with a catchment radius of 1.6km road distance to minimise the demand for bus transport and maximise opportunities to walk to school
- Adjacent community playing fields are an advantage
- Opportunities for joint use of land are to be encouraged
- Sites should have a slope no greater than 1:10
- Sites must be above the 1 in 100 year flood level and be well drained
- Sites should have a substantially regular shape
- Sites should be free of possible restrictions such as power easements, contamination, and environmental constraints.

The Department of Education and Training has confirmed that four public primary schools are likely to be required for a precinct of 7,600 dwellings, based upon the guidelines above. The precinct will also require 1 public high school. The draft ILP satisfies these requirements.

In terms of the proposed locations of the schools, DET has advised:

- The site for the proposed high school is not supported as it is not central to its catchment area, which will also include development on the western side of The Northern Road as well as development to the north and east of the town centre. A more suitable central location may be around the site of the central primary school to the west of the town centre. This would provide a walkable catchment of 400 and 800 metres for a larger number of students than the proposed location on the edge of the precinct.
- Also in terms of busing students and parents dropping off their children as part of their trip to work, it would be more convenient to locate the high school nearer to the centre of the development near main through roads. These roads will eventually carry local public transport. High schools and primary schools generate

considerable bus, car and pedestrian traffic. The location of the government high school near the Catholic primary/high school would create traffic congestion with nearly 3,000 students moving in and out of the area at peak school times each school day.

- It is understood that the proposed high school site has been selected because:
 - it is relatively flat land,
 - it provides opportunities for co-location with a primary school, allowing new models of K-12 schooling to be trialled,
 - it is adjacent to proposed open space and sporting fields, allowing more efficient use of land resources, and
 - planning of the GDC lands immediately to the north of the Oran Park Precinct has located a site for another high school within this area, and it would help service the northern parts of the Oran Park Precinct.

By contrast, a potential high school site in the central area may have a more difficult topography.

- Secondly, DET is concerned that there is no primary school proposed in the northern sector of Oran Park. It is suggested that the proposed site to the east of the town centre be re-located to the northern side of the main link road, to be more centrally located within a walkable catchment for the northern sector of the precinct within a contained area. A site adjacent to the proposed community facilities / open space in the north-east sector of the precinct is supported.

Discussions with DET about the re-location of both these school sites are continuing.

In terms of the proposed size of school sites and design considerations, issues include:

- The DET standard size requirements for school sites are outlined above. At this stage, information has not been provided detailing the size of the proposed sites within the ILP. It is likely, however, that the proposed school on the western side of The Northern Road will have an area of about 2.3 ha, below the Department's standard of 3 ha. This is on the basis that the school may share use of the adjoining open space for play and sporting uses. However, any arrangement to reduce the size of school sites associated with joint use of community facilities needs to be negotiated on a case by case basis, and cannot be simply assumed. Locating primary schools alongside sporting fields provides no benefit to the school and does not justify a reduction in the size of site required, as playing fields are not a standard inclusion for

primary schools anyway. Key considerations for primary school playspace are safety, security, supervision and shade, matters which are more challenging to address when sporting fields are used as playgrounds.

- For these reasons, the inclusion of playing fields within the two primary schools on the eastern side of The Northern Road is not supported. The school requires the full 3 ha to allow flexibility for use of demountable classrooms. Sporting fields are not included within the standard requirement of 3 ha. However, locating high schools adjacent to sporting fields can lead to reductions in the size of sites required (by negotiation), as playing fields are standard inclusions for high schools.
- Leading practice principles (as outlined in Chapter 2) suggest that where possible schools should be co-located with other types of community facilities, to create a community focal point and promote accessibility and convenience for families. In particular, co-location of primary schools with community centres and childcare facilities is considered to be generally advantageous. However, the draft ILP shows no other community facilities located within or adjacent to the proposed school sites. It is understood nevertheless that the landowners aspire to the creation of community focal points with co-located facilities around primary schools, but have not indicated this on the draft ILP in order to retain flexibility. This issue will need to be clarified in the next iteration of the ILP.
- Where primary schools are to be co-located with other community facilities, there is potential scope for the sharing or joint use of facilities that would reduce the land required if each facility were to be provided separately (eg common parking areas, shared school / community hall). However, joint use and co-location arrangements take some time to negotiate, and cannot be simply assumed. Issues for consideration include ownership of open space and buildings, arrangements for guaranteed access, management and maintenance of jointly used facilities, design details, safety and supervision issues and ensuring the quality and functionality of the space for public community use. At this stage of the planning process, sites should be identified on the basis that co-located facilities will still require standard sized sites, but that planning negotiations will aim to achieve more efficient outcomes. On this basis, the sites to contain a primary school, childcare centre and community centre will need to be about 3.5 ha.

No issues have been identified with regard to the location and size of the proposed Catholic school. There will be two private high schools within the precinct, the Catholic one and Macarthur Anglican School, and it is recognised that the likely high attendance at non-government schools will reduce demand for government school places. The affordability of private schools for new residents may be a consideration.

Advice in relation to the planning of TAFE colleges for the South West Growth Centre has been provided in Chapter 4. The draft ILP has identified a site within the town centre that could potentially be developed as a TAFE college. However, at this stage a TAFE college is not proposed for Oran Park, and in any event would not be required for many years. Consideration of alternative uses for this site is encouraged.

Accommodation for other lifelong learning activities (eg community colleges, evening classes, U3A) can be provided through other types of facilities such as community centres and schools, without the need for purpose-built facilities. These needs should be considered in the design of such facilities.

6.4.2 Children's services

Childcare centres are generally a permitted use within residential areas and do not necessarily require land to be designated at the master planning stage. The provision of childcare has changed substantially in recent years, associated with shifts in government regulation and funding policy, such that the private sector is now the provider of the majority of childcare centres in Australia. As such, the provision of childcare in most new developments is commonly now largely left to market forces, once need can be demonstrated.

However, there can be benefits in identifying sites for childcare centres within neighbourhood and district centre hubs, even if these are ultimately developed by private operators, for the following reasons:

- to ensure some childcare is provided in central and conveniently accessible locations, and to reinforce the role of the hub as the focal point for the community;
- to locate childcare adjacent to complementary land uses such as schools and community centres;
- to help avoid childcare centres locating inappropriately in residential areas with amenity impacts on adjoining residents (particularly in terms of traffic congestion);

- to encourage the provision of multi-purpose children's services which incorporate a mix of long daycare, pre-school, occasional care and out of school hours care for primary school children,
- to allow for government / community sector provision of childcare for sections of the population not profitable for the private sector, such as children aged 0-2 years, children of shift workers and those with special needs.

A number of different forms of childcare and activities for young children are generally provided in a community, including long daycare, family daycare, pre-school, occasional care and playgroups. Additionally, services to support families with young children may be provided (parent education, Families First initiatives). It is not appropriate at this stage of the planning process to try to anticipate need for the various types of services. Instead, leading practice encourages planning of multi-purpose childcare centres and family centres, which can adapt as precise needs are identified or provide a mix of services.

Planning for childcare will also need to address the need for out of hours school care for primary school aged children. Such need is usually met through multi-purpose childcare centres, through before and after school programs co-located within schools or through vacation care programs in community centres.

Council's Section 94 Contributions Plan provides for the levying of contributions for the building of childcare services, which are operated by community based or not for profit organisations and not be Council. The Plan requires contributions towards the provision of 70% of required spaces for long daycare, occasional care and pre-school and 25% of the required spaces for out of school hours care, on the basis that private operators will provide the remaining spaces required.

The Council standard allows for 20 long daycare / pre-school places per 1000 people, based on an incoming population profile of 13% of the population aged 0-4 years of age. These 20 places per 1000 people require 6.5 sqm of indoor floor space per place. This calculation is then discounted to cover 70% of the total floor space requirement.

The provision rate applicable for out of school hours care is 8.8 places per 1000 people, assuming 13.2 % of the population is aged 5-12 years. This is then discounted to calculate the 25% of total provision required via Section 94.

It is stressed that application of the Council Section 94 standards is not a measure of the full need for childcare facilities, but just of the

minimum requirements to satisfy developer contribution responsibilities. It is also noted that the Council standards do not include demand arising from employment lands.

Applying these formulae to the population forecasts for the Oran Park Precinct, it is estimated that the incoming population would give rise to a requirement for about 323 long daycare / preschool places and about 51 out of school care places.

The number of childcare centres required to provide this number of places will depend on the size of each centre. Assuming a centre of about 80 places, then 4 long daycare / pre-school centres would be required to meet the designated 70% of total requirements. Providing smaller centres of about 40 places would give rise to a need for 8 centres. Out of school hours care could also be accommodated in these centres.

Based on Council's existing Section 94 requirements, the 323 places would require a built area of about 2,1020 sqm, and a land area of 5,255 sqm. The afterschool care places would require an additional 330 sqm built area and 826 sqm site area.

The draft ILP has identified two locations for community facilities, without designating what the facilities might include. Issues arising from the draft ILP include:

- While the number of childcare centres required will depend on their size and number of places, it is clear that more than two childcare centres will be required for a population of over 23,000 people, particularly if centres are to be locally accessible, equitably distributed and not too large.
- Locations for consideration for potential childcare facilities include:
 - the western side of The Northern Road, to serve the 1,900 dwellings in this neighbourhood,
 - adjacent to neighbourhood community centres or shopping centres, to provide a focal point or community hub,
 - adjacent to the proposed primary schools, for convenience of parents dropping off children of different ages,
 - close to or within the town centre, to address the needs of the town centre workforce and commuters,
 - close to or within the employment lands on The Northern Road, to meet workforce demands.
- The above accounts for only about 70% of anticipated demand. Additional private sector facilities will also be required, although sites do

not necessarily need to be designated at this stage.

6.4.3 Community centres

Community centres provide space for a variety of community activities and classes (eg yoga, playgroups, craft groups, after school activities for kids), for organisations and community groups to meet, for sessional and outreach services and for private functions, such as birthday parties. They also provide sources of community information and a focal point for community development initiatives and the building of community networks and support structures.

Community centres may be provided at a variety of scales to meet the needs of different sized catchment populations. At the local level, they may comprise a simple community hall available for hire, ranging through to a large multi-storey building incorporating a variety of functional spaces at the urban core level. In recent times, many councils have moved away from providing small, stand alone community centres for local neighbourhood populations, on the grounds of their management and maintenance costs, lack of flexibility, limited use, security problems and lack of capacity for staffing. Instead, leading practice now supports the provision of larger multi-purpose facilities for a larger population catchment that can provide a variety of higher quality social and recreational amenities and combine a variety of functions. Having larger facilities also increases opportunities to base services with staff in the centres, thereby increasing their levels of activity.

A multi-purpose community centre might incorporate:

- a variety of large and smaller spaces suitable for a range of social, leisure and cultural activities. These might include a hall suitable for large gatherings, performances and physical activity such as gymnastics or dance classes, and rooms suitable for creative activity such as photography or pottery;
- meeting rooms, also suitable for adult education or training activity;
- office space for a community development worker, and for other human service providers;
- rooms for sessional services such as baby health clinic, counselling or family support services;
- kitchen suitable to support private functions such as birthday parties;
- plenty of storage to meet the needs of a variety of user groups;
- adjacent outdoor space with children's play equipment and barbecue, to provide for spill over social events and activities for children.

These centres are often located adjacent to outdoor recreation facilities such as tennis or netball courts, to provide a leisure focus as well as space for community activities. They may also be located adjacent to a school, enabling sharing of a hall or other facilities. Co-location with other community facilities, such as childcare, youth or family services, is also encouraged.

Camden Council's Section 94 Contributions Plan provides for the collection of contributions towards the provision of community centres, to ensure that future populations within Camden are provided with an adequate level of service. The Plan requires that multi-purpose community centres be provided at the rate of 42 sqm per 1,000 people. Land requirements are 2.5 times the floorspace requirement. A typical community centre in a new release area is usually between 350 and 500 sqm, and serves a population of 6-12,000 people.

Based upon this standard, a forecast population of 23,100 people would generate a need for about 970 sqm of community centre floorspace, or a land area of about 2,425 sqm. This would equate to 2 multi-purpose neighbourhood community centres to serve the precinct.

At the local level, the draft ILP for the Oran Park Precinct has identified two sites for community facilities, with particular uses yet to be determined. Issues arising include:

- The two sites are not well located with regard to equitable access across the precinct, in that they are both located on the eastern side of the major road passing through the town centre, leaving no community facilities on the larger western side of this road.
- It is noted that no centres are proposed on the western side of The Northern Road. This road may be a physical and psychological barrier to residents accessing community centres in the eastern side of the precinct. In this context, a community centre closer to The Northern Road that could more equitably be shared with the western population of the precinct would be an advantage, given that this development will not be large enough to support its own community centre.
- Leading practice principles suggest that community facilities should be clustered together or co-located with other public uses such as shops, primary schools or open space, in order to create a cluster of facilities that together promote convenient access, community identity and an active hub or "heart" to the community. One of the identified sites is sited adjacent to open space. However, the other is not adjacent to any other public use.

The location of community facilities on stand alone sites in the midst of residential areas is not supported.

- The two required multi-purpose community centres within the Oran Park precinct should be designed to have complementary, rather than identical, amenities to expand opportunities for community activities and programs across the whole precinct. For instance one might have a particular youth or leisure focus, and one a community arts focus.

6.4.4 Health, welfare and support services

The Oran Park population will require access to both local and district level health, welfare and support services. Local level services such as medical practitioners, early childhood services and aged daycare services may operate from commercial premises in the town centre or village centres, or as sessional services from the community centre. District level services, serving the district catchment, will need to be located in the town centre, close to public transport and parking and preferably clustered to promote convenient access and synergies amongst related services.

From the advice provided in Chapter 4 regarding the regional distribution of services, at this stage it would appear that provision should be made within the Oran Park town centre for:

- One community health centre, as previously described in Chapter 4 and requiring a site estimated as 5,500 sqm,
- Spaces for complementary private medical and allied health services, to create a health hub,
- Potentially one Department of Community Services Community Service Centre,
- Office / shopfront space for a dozen or so other government and non-government service providers,
- An aged and disability services hub, accommodating Home and Community Care services.

Clustering of these facilities and services into a community precinct would be advantageous.

The draft ILP has made provision for commercial and mixed use space within the town centre which should be sufficient to accommodate such services and facilities. As discussed previously, the needs of some of these services may be met through leasing of commercial space. However, further advice on this issue is awaited from Health and Community Services agencies. The precise locational and spatial requirements of such services will need to be considered in the master planning of the town centre.

In addition to meeting the accommodation needs of health and welfare services, recurrent funding for staffing, programs and activities will need to be provided through a variety of government programs to enable both government, non-government and community-based organisations to deliver services.

In terms of GP services, applying a benchmark of one GP per 1,500 population, as suggested by Sydney South West Area Health Service, indicates a need for 23 GP's across Oran Park and Turner Road Precincts over the next 15 years. One model may be through co-location in a major facility offering potential for funding sources across all levels of government and with private sector input, with GP's as tenants and with co-located diagnostics and associated services. SSWAHS will need to continue to work with the planners on the provision of private health services (GP's, specialist medical, allied health professionals, pathology services, residential aged care facilities). If these are simply left to the market to come along later, it is highly likely that they will be provided inadequately.

6.4.5 Civic and cultural facilities

Given the limited cultural facilities currently available within Camden and distance to future facilities within the Leppington regional centre, it will be important that cultural facilities be provided within the Oran Park town centre to support the cultural development of the release areas. These might include:

- A hall suitable for performances and civic functions. The size of such a facility and amenities required to support a range of activities (music, dance, drama) will require further discussion with Camden Council, in the light of its future hierarchy of facilities across the growth centre.
- A district level community facility, to contain office and meeting space for a variety of organisations and community groups. The foyer and reception area should be suitable for displays and exhibitions. The facility should also make provision for spaces for more specialist community activities and programs than can be accommodated in local neighbourhood community centres, such as community arts activities. Council's Section 94 Plan for existing release areas includes provision for two district level community centres for a population of 75,000 people. On this basis, one such facility would be required for the Oran Park / Turner Road catchment population.

- A library: Camden Council's Section 94 Plan for its existing release areas provides for libraries to be provided on the basis of 39 sqm per 1,000 people as a branch function, and an additional central library area at a rate of 31 sqm per 1000 people.

As outlined in Chapter 4, the hierarchy of branch and central libraries proposed to service the Camden component of the growth centre, and the locations of such facilities, are matters still to be considered within Camden Council. It is clear, however, that the Oran Park town centre will provide a suitable location for a branch library that would service the southern portion of the South West Growth Centre. The size and status of such a facility would require further consideration within Council.

The draft ILP for the Oran Park Precinct identifies a site in the heart of the town centre, adjacent to the town square, for a library / district community centre / cultural centre. The size of this site is yet to be determined. A site for additional civic uses is identified adjacent to this site.

The location of this site and proposed co-location of library, district community centre and cultural facilities is supported. The site is positioned to enhance the identity of the town centre and contribute to its level of activity and cultural development. The town square provides further opportunities for outdoor civic and cultural activity associated with the buildings.

The design and embellishment of the public domain and inclusion of public art throughout the precinct will be an important element of the cultural development of the Oran Park Precinct and the creation of its unique identity and sense of place. While these are matters for detailed design in the masterplanning phase, it is important that sources of funding for public art and cultural development be identified as part of the planning agreement negotiations.

6.4.6 Facilities and services for young people

At the local neighbourhood level, the needs of young people for space for social and leisure activities may be met through multi-purpose community centres and a well designed public domain. However in addition to these, a population of the size envisaged for the Oran Park district catchment will give rise to a need for some more unique spaces for young people to enjoy more specialist activities and programs, including both structured and unstructured activity. There will also be a need for accommodation for youth workers and for youth support services.

Camden Council's Section 94 Plan for existing release areas provides for the collection of contributions towards the provision of youth centres on the basis of 915 sqm for a population of 44,000 people. On this basis, a facility of about 738 sqm built area would be required to serve the Oran Park / Turner Road population.

The draft ILP has not identified a specific site for a youth centre, although it has identified a large area within the town centre for "civic uses". However as this site is also proposed to contain a courthouse and police station, it will not be the most appropriate location for a gathering place for young people. Further discussions are required to identify the most appropriate location for the youth centre. Locational considerations include:

- Proximity to public transport services,
- Safety, security and capacity for casual surveillance,
- Adjacent outdoor space and recreation facilities to provide a leisure focus,
- Design to provide for flexible uses for both boys and girls, and for a variety of social and leisure interests.

The open space and recreation strategy for Oran Park proposes that an indoor recreation centre be provided for the new population. Co-location of the youth and recreation facilities is encouraged.

6.4.7 Facilities and services for older people

The social, leisure and recreational needs of older people may be met through mainstream services and facilities for the whole community, and through programs and activities for older people delivered within multi-purpose community centres at the neighbourhood level and civic and cultural facilities at the district level. Leading practice now steers away from providing age-specific buildings, such as senior citizens centres, which can only be used by specific sections of the population and which thereby run the risk of being under-utilised for much of the week or as the population changes. Instead, the usual practice now is to provide multi-purpose facilities which have flexibility to incorporate activities for different target groups as required. This may necessitate a fairly large centre, which can be used by different sections of the population concurrently. The design needs to consider the requirements of older people and people with a disability. It will be important to incorporate universal design principles in all community facilities to ensure their flexibility and adaptability and avoid expensive retro-fitting later.

The accommodation needs of aged care services have been addressed above in relation to welfare and support services. There will also be a need for

accommodation for daycare programs, and for the delivery of services such as meals on wheels.

As outlined in Chapter 4, provision will also need to be made for residential aged care facilities (hostels and nursing homes) for a population of the size estimated. It is understood that an aged care facility is proposed for the site at the intersection of Cobbitty Road and The Northern Road. However, additional facilities will also be required, particularly in the longer term as the proportion of older people in the Camden population increases. However, such sites may be purchased through market forces and do not necessarily need to be identified at the precinct planning stage.

6.4.8 Entertainment facilities

Such facilities will be provided on a commercial basis according to market demand, with suitable land available within the mixed use and commercial areas within the town centre and adjacent to The Northern Road. Key considerations for developers include:

- Ways of encouraging the early provision of entertainment facilities at the outset of development, given the existing shortage in the surrounding area;
- Ensuring entertainment opportunities are affordable, particularly for young people;
- Including both indoor and outdoor entertainment opportunities.

6.4.9 Places of worship

As well as providing places of worship, churches can provide an important base for community development, youth, volunteer and welfare support activities in new communities, and are important in building community spirit and identity. Churches may also provide halls and other spaces which can be utilised for community activities by the general community. Religious organisations may also be providers or partners in the provision of other community facilities and human services (particularly for young people, older people and disadvantaged groups). For these reasons, it is important that places of worship be established within the South West Growth Centre.

The acquisition of sites for places of worship is generally left to market forces, according to their ability to purchase sites, and it is difficult to specifically identify sites in the precinct planning process. However, the relatively high cost of zoned and serviced sites, particularly in central, accessible locations, often precludes places of worship from establishing in new communities.

Ensuring that places of worship are provided within the Oran Park Precinct will be a matter for consideration among the land developers, who will need to identify and set aside sites and facilitate their development as places of worship as an integral part of the urban development process.

At the same time, it is recognised that that not every religious organisation needs its own facility, and that such organisations may also utilise other community facilities for their meetings, (such as community centres and schools), particularly as these are often not used by others when demand for space for religious activity is at its highest (for example on a Sunday morning for Christian denominations).

The following issues should be taken into consideration in the future planning of places of worship within the Oran Park Precinct:

- places of worship can contribute significantly to community identity and activity. They should be located close to other types of community facilities to create synergies and help provide a focal point for the community (eg located within centres).
- places of worship need to be readily accessible and visible, and located so as not to impact on adjoining residential areas.
- given the limited utilisation of such facilities across the week, it is important that opportunities for shared or joint use be explored with other types of facilities, or multiple church groups, in the interests of making the most efficient use of land resources. This includes shared provision of parking and meeting/activity space.
- church design and placement can offer significant urban design benefits in terms of providing iconic buildings, landmark features, community identity and way finding.

The draft ILP for Oran Park has not identified specific sites for places of worship, although these could be incorporated within the two sites designated for community uses and the private school site. However as church sites do not necessarily need to be identified at the precinct planning phase, this is not a major shortcoming. It will be important, however, that consideration be given to the issues raised above regarding churches as detailed planning of the Oran Park Precinct gets underway.

6.4.10 Legal and emergency services

Advice regarding the distribution of court, police, fire and ambulance services across the growth centre as a whole has been provided in Chapter 4.

In summary, precise needs for sites within the Oran Park town centre or surrounding precinct have not yet been identified. More precise information regarding the needs of relevant agencies is awaited.

In the meantime, the draft ILP has identified possible locations for a courthouse and associated police station within the civic precinct of the town centre. The suitability of this site for a police station will need to be considered by NSW Police. Given the potential for traffic congestion around this high density and very central location, an alternative site with better accessibility to the main road network may need to be considered.

6.4.11 Facilities to support the employment population

The services and facilities to which a workforce generally requires access include:

- access to shops and general stores for daily convenience needs, including snacks and meals, cigarettes, chemist supplies
- access to everyday services, such as a post office, bank or ATM
- pleasant spaces away from the workplace to eat lunch or have a break
- places to socialise and gather after work, or to network with those from other firms, such as cafes and pubs
- open space areas for recreation, exercise and fitness before or after work or during lunch breaks
- childcare for parents with pre-school aged children and babies
- access to training and lifelong learning opportunities
- access to library services
- business support services, including places for meetings and access to resources such as photocopying or IT support.

The Oran Park Precinct is anticipated to provide employment for a workforce of around 2,300 people, of which about 2,000 jobs will be retail and office jobs located in the town centre. The needs of this workforce will be met through the variety of services, facilities and areas of open space located in the town centre.

The needs of the workforce of about 300 people in the employment lands on The Northern Road are likely to be met by facilities and services located in the commercial centre on the opposite side of The Northern Road, and by facilities and services within the employment lands themselves.

6.5 Funding and delivery arrangements

The facilities required to support the residential and employment populations of the Oran Park Precinct will be provided through arrangements with:

- The NSW Government in terms of primary and high schools. It is noted that current practice is for departmental schools to be provided through public private partnership (PPP) arrangements, thereby facilitating the timely delivery of schools. This is intended to occur once about 200 children are ready to enrol. Funding for government education facilities will be provided as for other elements of state infrastructure, on the basis of 75% of costs to be derived through developer contributions and 25% to be provided by the state government. Funding for a number of primary and high schools for the South West Sector (for both land acquisition and building) has been included in the State Infrastructure Levy, as outlined in the Special Infrastructure Contribution Practice Note issued by the Growth Centres Commission in December 2006. Sites for DET schools are not required to be zoned specially as school sites, but are generally zoned for residential uses, thereby permitting some flexibility about future use and acquisition. The DET needs to agree to the sites identified, and is not obliged to acquire sites identified in masterplans which are not considered suitable for its uses.
- The NSW Government in terms of health, welfare, justice and emergency services delivered by its agencies. The Special Infrastructure Contribution Practice Note issued by the Growth Centres Commission in December 2006 includes provision for facilities for health, police, fire, ambulance and justice services for the South West Sector, including over \$17 million for an integrated primary health care centre in Oran Park. As outlined previously, these agencies have not yet determined precise facility and locational requirements. It is noted that no provision has been made in this document for funding for facilities for Department of Community Services or Department of Ageing, Disability and Home Care. It should also be noted that the infrastructure levy applies only to capital costs, not recurrent funding for leasing of premises.
- Camden Council in terms of Section 94 facilities (childcare, community and cultural facilities). Such facilities may also be provided as works in kind by developers or through planning agreements, subject to negotiation with Council. Details are provided in the following section.

- Sale of sites and development by commercial, private sector and non-government organisations. This is dependent on market forces. Developers will need to consider ways of encouraging early provision of facilities and services to support the early stages of settlement.

In addition to planning for built facilities, agencies will also need to consider sources of recurrent funding for the staffing and programs to be delivered from them. In the longer term, recurrent funding is a greater cost to government than capital costs, and sources of recurrent funding will need to be identified and factored into agency budgetary processes to accompany the delivery of built facilities. This is particularly important given that existing services in the surrounding area are already overstretched and will have no capacity to service the new population without additional resources.

A key issue for the on-going planning and delivery of social infrastructure is the need for a structure or mechanism that will bring together state government human service agencies with Council community service staff for the integrated planning of facilities and services. Human service agencies traditionally have worked in isolation, with limited co-ordination at a planning and resourcing level. The limited time available for this study has necessarily focused on the requirements identified by agencies individually.

Yet leading practice now demands more creative and innovative solutions to the provision of human services, and greater flexibility and responsiveness to emerging needs. In particular, objectives for co-location, shared and multiple use of facilities and integrated service delivery, to both better meet the needs of consumers and make more efficient use of valuable resources such as land, require that agencies come together for joint planning.

This requires a formal structure or mechanism involving senior management staff with capacity for decision-making, for if left to the initiative of individual agencies, it is unlikely to occur, or to have the "clout" required to ensure inter-agency co-operation and decision-making. This also recognises that it can take some time for co-location and joint use initiatives to be negotiated, as it challenges traditional agency responses and boundaries, and can involve complex issues concerning ownership, governance, management, maintenance and resourcing, which may need to be resolved at a senior level.

For an integrated human services planning structure to be effective, leadership will need to be provided by an agency with a recognised brief to encourage a "whole of government" approach that challenges the conventional "silo" approach of

individual agencies and their traditional delivery practices, and has ability to push for innovation. Options include:

- The Growth Centres Commission, given its brief to co-ordinate infrastructure delivery and funding within the growth centres,
- The Premier’s Department, through its regional co-ordination program, and
- The Human Services Senior Officers Group for South Western Sydney.

It is recommended that this issue be considered further by the Growth Centres Commission, with a view to having a structure which can take the planning process for human services further to be determined by the end of the exhibition period for the precinct plan.

Requirements for district level facilities have been calculated on the basis of a catchment population of 35,500 people, being the combined Oran Park and Turner Road Precincts.

6.6 Section 94 requirements

This study was required to identify the community facilities to be provided by Camden Council, and their spatial requirements and costings, to inform the preparation of a Section 94 Contributions Plan for the Oran Park Precinct. This has involved consideration of Council’s current Section 94 standards and requirements which apply to existing release areas. These were then reviewed in the light of Council’s experience of their appropriateness and capacity for sustainable management of the resources that they yield.

A full explanation of the Section 94 methodology is provided in the draft Oran Park Precinct Section 94 Contributions Plan. Drawing from the discussion of requirements and standards outlined above, section 94 requirements for community facilities are summarised in the following tables:

Table 5: Oran Park local level community facilities

<i>Type of facility</i>	<i>Number of facilities/ places</i>	<i>Total floor area</i>	<i>Total land area</i>
Multi-purpose community centre	2 centres	970sq m	2,425 sqm
Long daycare / preschool	323 places (eg 8 x 40 place centres or 4 x 80 place centres)	2,102 sqm	5,255 sqm
Afterschool care facility	51 places	330 sqm	826 sqm
Family day care office	1 office	29 sqm	72.5 sqm

Table 6: Oran Park district level community facilities

Type of facility	Standard	No. of facilities required	Size of facility	Land area required	Comment
Branch library	39sqm per 1,000 people plus 20% circulation space	1	1,660 sqm	4,150sqm	Branch library can be expanded in second stage to accommodate demand from Maryland and Catherine Field, or a second branch library can be provided
Youth centre	20.8 sqm per 1,000 people;	1	738 sqm	1,841 sqm	Youth centre can be expanded in second stage to accommodate demand from Maryland and Catherine Field, or a second youth centre can be provided
District community centre	22 sqm per 1,000 people	1	781sqm	1,952sqm	A second district community centre will be required for Maryland / Catherine Field precincts
District cultural centre	18 sqm per 1,000 people	40% of 1 centre	40% of 1,620 sqm	40% of 4,050 sqm	1 cultural centre will be required for the Oran Park catchment of 90,000 people. Its cost will need to be apportioned on the basis of 40% for Oran Park/ Turner Road and 60% for Maryland / Catherine Field

The location of proposed district level facilities within the Oran Park town centre will need to be considered further. Co-location will provide opportunities to rationalise sites and floor spaces, such that a more efficient use of resources might be achieved than is suggested by the above table. However, co-location efficiencies are subject to design detail. Until concept designs can be prepared, it is proposed that Section 94 contributions be levied on the basis of site and floor areas outlined in the table above.

The approach to costing of facilities, including allowances for land acquisition, building, fit-out, design and supervision, contingency, public art, and consultant studies, is provided in the draft Oran Park Precinct Section 94 Contributions Plan. This also provides for contributions towards the development of a new Administration Centre for Camden Council.

Further consideration will need to be given to the levying of contributions for community facilities

from employment lands, and for regional community facilities located beyond the Oran Park catchment area, as planning proceeds and requirements are resolved.

6.7 Supporting community and cultural development

In addition to facilities and services, community development and cultural development strategies will be required if the social sustainability objectives for the South West Growth Centre outlined in Chapter 2 are to be achieved. This recognises that built facilities by themselves will not bring people together and create an active community life, although buildings and spaces are necessary to provide the platform for this to occur. It also recognises that the development of “community” does not happen automatically, but needs to be stimulated, with opportunities created through structures, processes and mechanisms that are well resourced. In new communities where everyone is a stranger, it can take some time for networks to develop and for activities and

services to be established. A well resourced community and cultural development strategy will be required to activate the community facilities, and to develop activities, programs, services and voluntary organisations to support community building.

A community development strategy will need to be developed for the Oran Park Precinct, with objectives including:

- to help ensure that Oran Park becomes a vibrant, lively community which has a sustainable and satisfying way of life and one that reflects the diverse interests and needs of its residents;
- to help build the social and cultural life of Oran Park, through establishing programs, activities and structures that meet the needs of local residents and encourage them to become involved in the life of the community;
- to build up the resources and resilience of Oran Park and support the development of civic organisations;
- to develop strategies which assist the new community to integrate with existing adjoining communities and the broader area;
- to encourage new arrivals to develop a sense of belonging and to become involved in community life;
- to stimulate the development of social networks and social capital within the community;
- to promote identity and sense of place through cultural development and public art strategies;
- to ensure there is equal opportunity for all groups within the community to become involved, including younger people, older people, Indigenous people and people from culturally and linguistically diverse backgrounds; and
- to develop processes for residents to participate in the ongoing planning and development of their community.

The community and cultural development strategy will need to be appropriately resourced. This will include securing funding for community development and cultural development workers, who can work with local residents to foster their active involvement in designing and implementing community development programs. It will also require funding to support local community building activities, events and initiatives for some years until they are established and self-

supporting, or secure alternative sponsorship (eg local business sponsorships).

Securing funding from government programs for community and cultural development strategies cannot be guaranteed. At the same time, Section 94 has not traditionally provided a mechanism for funding community development, as it requires recurrent, rather than capital funding (although provision is included within the Section 94 Plan for public art). However, in many new release areas, funding for community development initiatives has been provided for an initial period by the developer, through planning agreement negotiations. In preparing the Section 94 contributions plan for the Oran Park Precinct, consideration should be given to ways of ensuring that funding will be available for a community and cultural development strategy.

6.8 Conclusion

This chapter has outlined requirements for local neighbourhood and district level community facilities and human services and principles for their design and location. It has reviewed the draft ILP (February 2007) in terms of the extent to which it addresses these requirements and principles. It is recognised that this draft ILP has evolved since February and that many of the issues raised in this chapter will be addressed in the next iteration of the ILP. Nevertheless, the report has identified the issues requiring further consideration at this stage as including:

- the location of the high school and 1 of the primary schools,
- the size of the school sites, recognising they should not include playing fields,
- the nature, location and areas for both multi-purpose community centres and childcare centres, recognising their importance in clustering to create focal points for the new community,
- location of a youth facility,
- size of site for district level community and cultural facilities.

Sites will also be required in the town centre for a number of state government agency services, although relevant agencies have not yet identified their requirements. The civic and mixed use areas identified within the town centre will provide sufficient space to accommodate such uses as requirements are specified.

Section 94 requirements for local and district level community facilities have been identified, based largely on extension of Camden Council's standards for its existing release areas. Details of costings can be found within the draft Oran Park Precinct Section 94 Contributions Plan.

Additional issues for further consideration include:

- Levying Section 94 contributions for employment lands and regional level community facilities,
- Establishing a mechanism to bring together state government human service agencies and Camden Council in an integrated planning structure to co-ordinate planning, integrate service delivery and negotiate co-located and shared use of facilities, consistent with leading practice sustainability principles,
- Ensuring resourcing for a community and cultural development strategy for Oran Park is included in infrastructure agreements.

7 Open Space and Recreation Requirements

7.1 Demand Considerations

Based on the available research on sport and recreation participation in Western Sydney, it is predicted that the following factors will characterise the long term demand for recreation and open space opportunities across the South West Growth Centre:

- National health issues will continue to stress improving opportunities within the built environment for everyday **incidental exercise** within employment and residential areas and requiring designated walking and cycling tracks within nature corridors and natural areas.
- There will be a sustained demand for **health and fitness** opportunities, requiring both indoor and outdoor facilities.
- The **quality** of facilities and open space is becoming as important as quantity. Open space should be more carefully designed to take into account a wider range of needs. For example, well formed and well maintained paths that are suitable for older people, those with a disability, strollers, prams and young children using hard surface toys.
- The high demand for recreation programs for all age groups will continue, resulting in increased demand for **indoor multipurpose** sport and leisure centres.
- It is likely that as the population grows there will be increased levels of **cultural diversity** in the community, giving rise to a greater variety of sport and recreation needs.
- There are limited recreation, entertainment and commercial leisure opportunities for **young people**. There is a need to view them as having a legitimate claim on public space and this will need to be addressed in the planning of the public domain in all precincts.
- There will be an increased demand for **natural areas** as places to experience the natural environment, away from the urban setting and for appealing areas to walk and relax in a natural setting. In particular, more natural river settings, creek corridors and larger bushland parks are valued. There is high demand for walking and cycle networks, including track systems linked to corridors and natural areas.
- There will be an increasing need for more **innovative strategies** to manage competing recreation activities within key natural resource areas. In particular more adventurous activities such as higher impact activities like horse riding, mountain bike riding, trail bike riding and 4X4 drive use.
- Ongoing demand for a wider range of recreation opportunities for 'the **baby boomers**' and 'empty nesters' in the 50-60 years age cohort will be required, beyond the traditional passive opportunities. These age groups are under provided for within the current supply of facilities and opportunities in Camden.
- With an aging population there will be a need to improve **accessibility** of existing recreation opportunities for older people. This may include a more accessible public domain within residential and employment zones.
- Sporting codes are increasing the duration of playing seasons and increasing demand for training as well as competition grounds. Coupled with climate change, consideration needs to be given to **all-weather/synthetic surfaces** as an alternative to grass so that facilities can be used all year round and minimise demand for irrigation.
- Sporting clubs are demanding **higher standards of provision**, with changing facilities, storage and floodlighting essential inclusions so they can play in the evening and in winter.
- Changing demand patterns suggests growth in **adventure based activities** such as artificial climbing wall, bmx, skateboarding, in-line skating, mountain biking, trail running, beach volleyball within urban areas also need to be considered for future provision for youth.
- **Amenities** within parks are also essential. Shade, water seats, interactive equipment and skating and bike areas are core inclusions for parks to be used regularly.
- The increase in **community events** within parks requires additional facilities and utilities such as power, water, parking infrastructure.
- There is potential to explore **dual use** opportunities with schools to share resources

and facilities, particularly in the early stages of the Oran Park development when population numbers will be lower. This will assist to make some facilities financially viable.

- With an increasing trend to indoor multipurpose facilities, consideration should be given to the **design of community centres** to ensure that they can accommodate a range of leisure and recreation programs, for example dance, yoga, exercise, martial arts.
- There is increasing demand for passive recreation opportunities for families, and for affordable facilities and activities;
- Transport to sport is difficult for young people due to lack of public transport;
- Demand is strong for a hierarchy of playgrounds with more diverse opportunities for older children.

Demand for local open space relates to resident's expectations and aspirations. As outlined in Chapter 5, the future developments will contain a mix of families with children, adolescents and young people, and middle aged and older people. Local open space is important for encouraging informal interaction and creating opportunities for new and existing residents to come together and build networks, both at a local neighbourhood and whole of community level. In addition open space encourages extended family activity, for walking and cycling as well as family gatherings.

The provision of open space is also an important urban design consideration for the sites. The level of local open space will in part be informed by Council's standards of local open space provision, outlined below.

7.2 Establishing the quantum of open space required

Camden Council's Section 94 Contributions Plan relies on the findings of the 1993 Recreation Study to establish the following standards for the provision of open space within its existing new release areas in Camden:

- in (urban) residential areas, local and district public open space to be provided at the rate of 0.4ha and 3.24ha per 1000 population respectively, totalling 3.64 ha per 1000 people;
- in rural and rural-residential areas public open space is to be provided at the rate of 2.5ha per 1000 population;

- minimum area of local public open space to be 2000 sq m. and no further than 500 m. walking distance of any dwellings;
- minimum area of district public open space to be 5ha, located near public transport routes and no further than 2km from all dwellings.
- land which falls into the following categories may, in some instances, be able to be included as part of a public or drainage reserve, but will not be accepted as local open space if it meets any of the following standards:
 - is less than 30 metres in width,
 - is less than 30 metres in width from the defined edge of a water body to the open space boundary,
 - provides for the regional needs of the community,
 - provides for tourist areas or tourist recreation facilities
 - is provided as private open space or for private recreation facilities,
 - is provided as noise attenuation buffers, estate entrances or amenity areas, and
 - provides for the protection of the character and bio-diversity of the Nepean River floodplain, wetlands, or water quality features.

Importantly, land that is flood prone may not be counted at the full rate towards meeting Council requirements.

As identified in Chapter 5, the proposed development is expected to yield 7,600 dwellings across the site with a projected population of approximately 23,100 people. Based on Council's existing standard rate of open space per person, the total quantum of open space required would equate to 84 ha across the precinct. Under Council's Contributions Plan, 74.8 ha would be provided as district standard open space, and 9.2 ha would be required as local open space.

However, it is not suggested that this quantum is necessarily appropriate for the South West Growth Centre or that the Growth Centres Commission adopt this standard of open space provision without prior consideration of its adequacy and appropriateness. The quantum is based on historical precedence and was prescribed for incremental residential developments.

As outlined in Chapter 4, a new standard rate of provision is required based on a Regional Recreation Strategy for the South West Growth Centre. Most importantly, providing a standard rate of provision without commitment as to how the embellishment or management of this open space is to be undertaken is not sustainable. In

particular, the quantity of open space to be required needs to take into consideration the quality of that space and opportunities it provides for active and passive recreation. This reflects the fact that Camden already has a very large quantity of open space, much of which is not very usable.

The Growth Centres Commission has established an indicative development parameter of 50-70 ha of public open space for the Oran Park Precinct, to include both active and passive uses. This is based upon the conventional standard of 2.83 ha per 1,000 people.

Discussion with Camden Council has resulted in an agreement that within the Oran Park and Turner Road Precincts:

- Local open space requirements will continue to be calculated on the basis of 0.4 ha per 1000 people;
- District open space calculations will have regard to the quality of facilities to be provided and the availability of indoor facilities to meet some of the needs of the population. A demand based approach to calculating district open space requirements will be adopted, rather than application of a fixed standard. This will draw on Camden Council's recreation demand assessment study, ABS participation rates and the forecast size and characteristics of the incoming population. It also recognises that there are substantial opportunities for passive recreation associated with the wetlands, riparian corridors and conservation areas that occupy significant areas of the precincts.

The land budget data which accompanies the draft ILP for Oran Park indicates that a total of 72 ha of open space is proposed for active and passive recreation, comprising 21.45 ha on the western side of The Northern Road and 50.5 ha on the eastern side. This does not include riparian corridors and riparian buffers. It is assumed that the areas of open space nominated do not include conservation land, as its access and usefulness for recreation purposes may be limited (refer section 7.6 below).

It does, however, include some wetland areas which may be constrained for active recreation uses and replicates the existing open space areas in Camden. Further advice is awaited regarding the extent to which the open space proposed in the draft ILP is flood-prone or otherwise constrained (eg detention basins). While it is sensible in terms of land use efficiency to use flood-prone land for some recreation purposes, Camden Council has concerns that this limits the usability and quality of the open space provided, as well as significantly increasing its maintenance

costs. The proposed strategy for district open space outlined below is based on the principle that flood-prone land may not be used for active sporting facilities, but may be considered for passive recreation uses.

The open space proposed in the draft ILP also includes playing fields within schools; however as discussed in the previous chapter the Department of Education and Training does not provide playing fields in primary schools, and the extent of any community use of playing fields in the private school cannot be assumed at this stage. Accordingly, playing fields within school sites should not be included within calculations of the quantum of open space to be provided.

7.3 Local Open Space

As outlined above, application of the standard of 0.4ha/1000 people for local open space establishes a requirement of 9.2 ha to be provided within the Oran Park Precinct. Design considerations include:

- Camden Council specifies that local open space should have a minimum area of 2000 sq m. and be no further than 500m walking distance from any dwellings.
- The parks should have a range of play spaces and opportunities and cater to older children and young people as well as the traditional playground for young children.
- Co-location principles encourage local open space to adjoin other community uses, to create a community hub and rationalise parking and amenities.
- Within each residential precinct there could be a hierarchy of playgrounds ranging from an adventure playground that caters for older children, bike training area, as well as opportunities for sensory exploration for example interactive sounds, tactile materials including sand and water areas. Adjacent to the larger parks, children's play areas could be provided along with picnic and barbecue facilities. Provision rate should be in line with 1:500 dwellings. These local play areas may be located adjacent to Conservation Areas.

The table on the following page outlines the proposed strategy for local open space provision.

Table 7 Local Open Space requirements

Facility	Guidelines	Quantum
<p>6 x Children's Playgrounds Suitable for 0-4yrs fenced with equipment. Each play area should offer a different experience. They may be collocated with parks, conservation areas, school or community facilities.</p>	<p>Based on 1per 500 children aged 0-4. The current projections provided by Elton Consulting (p35) indicate 13% (3000) of the population will be children 0-4yrs. For standalone playgrounds the preferably, land should be a minimum of 3,000sqm. Where co-located the space may be reduced.</p>	<p>Total Area = 1.8Ha</p>
<p>6 x Playspaces Suitable for 5-12year olds allows for more independent play, skill development and cognitive development. However they still require adult supervision.</p>	<p>Based on 1per 500 children aged 5-12. These may include bouldering features, climbing areas, 'learn to' cycleways through to cycle obstacle course, skate facility, bmx/ mountain bike jumps and tracks. The current population projections Elton Consulting (p35) indicate 13% (3000) of the population will be children 5-12yrs. These areas could be collocated with children's playgrounds, school or community facilities for supervision and convenience of use for carers. Land should be a minimum of 3,000sqm.</p>	<p>Total Area = 1.8Ha</p>
<p>Managed Lawn Area/ Green Space Suitable for informal recreation use walking, exercise, dog walking area, community gardens, picnic areas, picnic tables, toilets and shelter are essential. Water features and public art provide interest and props for users, May be used for children's training, and lunchtime activities but not designed for competitions.</p>	<p>0.6 Ha in size These may be located within riparian corridors and conservation areas or co-located with playspaces, cycleways or playgrounds. They can act as nodes along cycleways to provide passive surveillance. Located within employment land or within the town centre. The managed lawn could have a mix of hard and soft surfaces and should have internet access, services (power and water) for small community events/street theatre/markets.</p>	<p>Total Areas = 1.2Ha</p>
<p>2 x Sports Parks (2.0Ha each) to accommodate demand for local sport and recreation training and competition. Rather than a series of single fields facilities are grouped to provide economies of scale for infrastructure. These parks may be collocated with a playground, playspaces, high school or indoor community facility</p>	<ul style="list-style-type: none"> ▪ 2 multipurpose fields or 1cricket/AFL ovals ▪ 2 tennis/netball courts ▪ 2 half court basketball courts ▪ Lights for training ▪ Amenity building with change rooms, storage and meeting room ▪ Parking 	<p>Total 4.2Ha</p>

7.4 District Open Space

District open space has been considered in terms of requirements for active sporting and recreation facilities and for passive recreation.

In terms of passive recreation, the draft ILP for Oran Park has identified significant land areas that will be set aside as riparian corridors, conservation areas and detention basins. These have potential to provide suitable opportunities to meet the passive recreation needs of the future population, without the need to identify additional sites for passive open space.

However, the Department of Natural Resources has advised that conservation areas, including Core Riparian Zones, vegetated buffers, biological linkages and remnant patches of native vegetation, may not be embellished for recreation uses. This in effect quarantines these areas from being used for passive recreation purposes. In addition, the GCC Development Code requires walkways and open space areas to be located outside core riparian zones.

The extent to which conservation and wetland areas may be embellished and used for passive recreation, thereby removing the need to identify

additional sites for passive recreation, is an issue that has not been resolved at the time of writing this report. It is understood that direction on this issue is forthcoming.

In the meantime, requirements for land acquisition and embellishment for district level passive recreation (including barbecue and picnic facilities, seating, pathways etc) have not been identified for Section 94 purposes. Once the utilisation of conservation areas has been resolved, appropriate embellishments to ensure the conservation areas and buffers and flood-prone land can provide usable spaces for passive recreation will be identified and costed. These requirements will then need to be incorporated in the draft Section 94 Contributions Plan for Oran Park.

The proposed strategy for district level active open space is designed to position leisure and recreation at the heart of the town centre as an attractor by providing more innovative leisure facilities that offer more diverse opportunities than have traditionally been provided in new release areas. These facilities are also designed to generate night-time social and economic activity. It also acknowledges trends in leisure and open space provision as well as environmental changes and in particular irrigation and maintenance issues with grass playing surfaces.

The strategy also acknowledges the land constraints on the site. The inclusion of indoor leisure facilities is designed to reduce the quantum of land required for playing fields and courts, as well as providing greater variety in recreation opportunities. The final facility mix for the proposed Leisure Centre, district parks and Recreation Centre will require feasibility studies based on consultation with sporting organisations and commitment from state as well as local government.

Key design considerations include:

- Camden Council design considerations note the minimum area of district public open space to be 5ha, located near public transport routes and no further than 2km from all dwellings. The requirement of the district open space to be within 2km relates to the use of this standard within smaller residential subdivisions and may not be feasible within a mixed use centre.
- Flood-prone land may not be used for active sporting facilities, but may be considered for passive recreation uses.
- The ILP does not provide sufficient provision of district standard open space, which needs to be suitable for sporting facilities. The provision of single fields dotted around the development

results in duplication of smaller facilities and provides limited social benefit. Single fields are not suitable for sporting competitions and multiple teams. As identified earlier in this report, it leads to a lack of opportunity for training, an inability to accommodate emerging sports and a failure to put into practice Federal and State government campaigns to improve general community health and well being.

- Oran Park has the population to sustain financially a multipurpose sports facility containing multiple fields and courts which adds to its stature as a District Centre.
- The development of a multipurpose indoor recreation and leisure centre as part of the Oran Park Town Centre (as outlined in Chapter 4) would create a subregional standard venue for new clubs and associations, sporting competitions and physical activity. The centre could provide for indoor sports/activities such as swimming, gymnastics, basketball, netball, volleyball, table tennis, indoor soccer, exercise and dance as well as therapeutic and wellness facilities, in addition to the traditional team sports offered by the outdoor sports fields.
- Designed appropriately it could also accommodate music, performances, concerts and non sporting events. This would create a 'night time' economy for the town centre and add to the vibrancy and economic viability of retail developments. This dual use may reduce the need for a separate cultural centre.
- The leisure centre could be located in the town centre precinct or adjacent to the employment land and accessible off North South East Road. The indoor centre could absorb the stand alone playing field in this location.
- Alternatively the centre could be located off Cobbitty Road in the south of the site offering synergies with the schools in this area.
- The range of activities that may be provided in a leisure facility would attract a cross section of ages and interest groups as well as attracting existing residents from the existing Camden LGA. The centre would also provide local employment and training opportunities.
- In planning for district sports facilities, consideration needs to be given to spectator requirements, especially parking and amenities.
- Internationally there is a trend towards flexible training areas which do not have full pitches but rather provide an opportunity for small sided games and half court practice areas. This increases the flexibility of use and prevents

pitches from being dominated by one sporting code.

- Consideration may also be given to synthetic turf pitches for training which require less maintenance and water and have a high capacity for use especially in winter months.
- A network of walking and cycling tracks which link with the regional network should be provided adjacent to the conservation corridors.

In terms of active open space and sporting and recreation facilities, Turner Road has been considered as part of the district catchment which includes both the Oran Park and Turner Road Precincts. Requirements have been based on the combined district population catchment of 35,500 people.

The proposed strategy for district level open space is summarised in the following table.

Facility	Inclusions	Strategy and indicative budget for facility and fittout	Quantum of Open Space
Leisure Centre designed to service 90,000 population	<ul style="list-style-type: none"> ▪ Aquatic facility with 25m freeform leisure pool and teaching pool ▪ Indoor (2 court hall) with provision for additional 2 courts to be added once population is established. ▪ Retractable seating for 1500 this would increase to 3,500 in stage 2 ▪ Commercial kitchen ▪ Sports oval with grandstand for regional school/ junior sporting competition ▪ 2 training ovals ▪ Athletics track may be located around the oval ▪ Synthetic turf pitches STP pitches (x6) for training with floodlights ▪ Netball/tennis courts (x 6) ▪ Fitness Centre (commercial entity) ▪ Dance/Yoga/Pilates activity room with wooden floor ▪ Multipurpose space with synthetic floor ▪ Wellness/massage/consultation rooms ▪ Creche facilities for users 	<ul style="list-style-type: none"> ▪ Provide sufficient space for expansion of facilities as SW Sector develops ▪ Accessible to wider catchment as well as public transport, pedestrian and bicycle. ▪ Grandstand capacity needs additional research to determine media/entertainment requirements ▪ STP pitches may be staged ▪ Netball courts may be staged ▪ Bike storage and lockers ▪ May be collocated with retail ▪ Health and medical services may be incorporated ▪ Other community facilities may be incorporated into this footprint eg youth, childcare indoor bowling ▪ Cafe ▪ Shop <p>Budget \$25m(2007 value to be indexed over time) incl fittout and professional fees.</p>	Range min 6.5-10Ha max dependent on components
'adventure based' Recreation Centre designed to service wider population 35,500pop	<ul style="list-style-type: none"> ▪ outdoor lagoon/leisure pool ▪ picnic bbq and lawn areas ▪ beach volleyball courts ▪ bmx and indoor skateboard facility with indoor rock climbing wall and indoor adventure arena, ▪ two court sports hall, ▪ media and sound studio ▪ arts and craft workshop ▪ computer room for internet access 	<ul style="list-style-type: none"> ▪ Some of the elements identified would require private sector involvement ▪ This centre may be integrated into retail or commercial centre ▪ Café may be leased ▪ Retail targeting generation 'y' <p>Budget \$10m incl fittout</p>	2.5Ha-5Ha dependant on availability of land and layout of building
3 x District Standard Sports	<ul style="list-style-type: none"> ▪ To provide for district standard adult 	<ul style="list-style-type: none"> ▪ Located on land without flooding or transmission line 	6Ha each in size

Grounds.

Designed to serve a population of 1:25,000 population. This is a higher threshold and acknowledges the proposed indoor facilities. The local sports park identified in table 2 may be expanded to incorporate one of the proposed district grounds dependant on location and access. CPTED, environmental sustainability, climate shade/shelter and universal access design criteria is assumed as guiding principles.

competitions and training or junior regional or state school championships. Amenity buildings, parking, storage core inclusions

Ground 1

- Playground 0.2Ha
- Parking 0.6Ha
- Bbq picnic area 0.6Ha
- Clubroom 0.25Ha
- Amenities 0.16Ha
- Hockey fields x2 1.20Ha
- Picnic shelters x 2 0.14Ha
- Lawn bowls x(2 greens) 0.32Ha
- Rugby fields x2 1.26Ha
- Hard Courts tennis/netball x4 1.27Ha
- Lighting
- Soft landscaping/ signage
- Storage

Ground 2

- Playground 0..2Ha
- Hard courts x (2 basketball, 2 netball, 2 tennis) =6 0.4Ha
- Multipurpose field (lacrosse, league, union. soccer) = 4 3.62Ha
- Spectator accommodation 0.25Ha
- Parking 1.0 Ha
- Amenity/clubroomx2 0.5 Ha
- Practice Nets x3 0.04Ha
- Lighting
- Soft landscaping/ signage
- Scoreboards
- Storage

Ground 3

- Playground /informal play area 0.2Ha
- Picnic/Bbq areas 0.2ha
- Amenity / shelter 0.2Ha
- Parking 0.6Ha
- AFL fields x2 3.3 Ha
- Softball x2 1.5Ha
- Lights, Signage, Storage

constraints

- Given the timeframe before the population threshold warrants a district standard facility. The final mix of courts and fields will require community consultation and council input based on most recent open space planning principles and research.

Cycleway-

Walkway located adjacent to riparian corridors and conservation zones

Minimum width 2.5m for dual use: walking and cycling, seats and bubblers essential along the cycleway and circular routes should be included where possible. Access points to the cycleway from employment and residential land and bike storage is essential for convenience of users. Fitness trails may be incorporated into the track.

Allow .70Ha for each km in length

The location of proposed facilities across the two precincts will need to have regard to the general principles outlined in Section 6.1, particularly with regard to equitable distribution, accessibility, connections and opportunities for co-location. It is anticipated that the final ILP's for both precincts will indicate how the requirements outlined will be satisfied.

7.5 A Multi Purpose Leisure Centre

The development of Oran Park creates an opportunity to enhance the range of opportunities for sport and active recreation activities available in the region. The development of a multipurpose

leisure centre as part of the Oran Park Town Centre would create a subregional standard venue for new clubs and associations, sporting competitions and physical activity. The centre would provide for indoor sports/activities such as swimming, gymnastics, basketball, netball, volleyball, table tennis, indoor soccer, exercise and dance as well as therapeutic and wellness facilities, in addition to the traditional team sports offered by the outdoor sports fields. This would create a night time economy for the town centre and add to the vibrancy and economic viability of retail developments.

A site will need to be identified within the ILP for an indoor leisure centre. Precise spatial

requirements will need to be considered in conjunction with Camden Council, who may own the facility even if it is operated commercially.

Locational requirements will include:

- Good access by public transport
- Parking facilities and opportunities for joint parking with other facilities
- Opportunities for co-location with the proposed youth centre
- Adjacent open space for district level sporting fields and courts.

It is acknowledged that the South West Growth Centre development is a long term project and population numbers will grow over time. For this reason the land allocation ensures that whilst the initial population does not justify large multipurpose facilities, the initial infrastructure and land budget allows provision for growth and expansion of the centres over time.

7.6 Conservation areas and trails

As outlined above, the Growth Centres Development Code and Department of Natural Resources currently require walkways and open space areas to be outside of Core Riparian Zones. The Department of Natural Resources has reiterated that local parks, playgrounds, cycleways and pathways should not be located within Core Riparian Zones, vegetated buffers, biological linkages and remnant patches of native vegetation. However, they may be located adjacent to these areas. DNR has advised that the draft ILP will need to locate all parks, cycleways and associated activity nodes to demonstrate that they are not proposed within the conservation areas.

This issue is under review and is expected to be clarified shortly. In the meantime, the following guidance is provided.

The conservation areas help protect the rural landscape and provide a visual buffer between the built areas. The open space and recreation facilities should be designed to maximise the visual advantages of the 'designated conservation areas', by locating adjacent to them. The local history and heritage of Camden should be represented in themes for the parks and the playgrounds as well as through interpretative signage, furniture and play equipment.

Locating cycleways adjacent to the conservation areas will provide increased opportunities for cycleways and additional open space as long as the activities do not impinge on the identified ecological value of the area. The critical success factor for these pathways is ensuring that they are

safe by having passive surveillance and regular activity nodes which may, for example, offer play areas for children, fitness equipment, seating, community gardens, public art or picnic facilities.

The creation of 'on road' and 'off road' cycleways provides an alternative transport mode as well as increasing access adjacent to the conservation area and creating greater connectivity between the new residential areas, facilities and services and the existing residential areas and natural resources. Cycleways need to provide access to community facilities and between residential areas as well as within them.

It will be important that trails and walking paths link into the regional trail network to enhance connectivity.

Arrangements for the ownership and management of conservation areas as well as open space and recreation facilities will need to be agreed with Council and DNR, to ensure that proposed areas and facilities can be managed and maintained to ensure their sustainability.

8 Conclusion

This report has considered the community facilities, human services and open space that will be required to support the residential and employment populations in the future Oran Park Precinct. The Precinct, when fully developed in 15-20 years, is expected to contain about 7,600 dwellings, a residential population of about 23,100 people, and a workforce of about 2,350 people. A variety of new facilities, services and open space opportunities will need to be provided, recognising that existing facilities in the established parts of Camden will not be able to extend to cover the new release areas. These new facilities will need to complement those in the established areas, and those to be provided elsewhere within the Growth Centre, in order to ensure that a comprehensive range of local, district and regional level facilities and open space will be available across the Growth Centre for the new population.

The report has identified a number of fundamental issues that will require further consideration as the planning of the Oran Park Precinct moves forward. These include:

- The current distribution of community facilities and open space in Camden, Liverpool and Campbelltown has evolved historically and incrementally. There is a lack of consistency in the provision of facilities across council areas. The cross boundary nature of the South West Growth Centre means that planning for community facilities, recreation and open space requires a more strategic focus than in the past. Incremental planning for single release areas or precincts leads to a lack of opportunity for higher order facilities for larger population catchments, an inability to accommodate emerging sports and cultural activities and a failure to put into practice Federal and State government campaign strategies to improve general community health and well being.
- The report was required to consider community facility and open space requirements for the Oran Park Precinct in the context of the likely distribution of major facilities and open space across the region. While the report has identified regional requirements for some types of facilities, where responsible agencies have undertaken some internal planning, it has been beyond the scope of this study to prepare comprehensive regional strategies for community facilities and open space. Such strategies would require not only the involvement of relevant state and local government agencies, but also commitment from them in a partnership approach that would ensure ownership and delivery of the outcomes. It is recommended that leadership for the preparation of regional strategies should come from the Growth Centres Commission, particularly in relation to cross-boundary issues involving Camden and Liverpool City Council.
- Associated with this, there is a need for Camden Council to develop a “centres strategy” which would identify its vision and objectives for the future development and hierarchy of the various centres within the LGA which will expand and develop over the next couple of decades. In the absence of this, it is difficult to determine the appropriate distribution of major community, cultural and recreational facilities among the centres within Camden and more generally across the region.
- The study has demonstrated that a number of key state government agencies have not yet considered how they might address the future needs of the South West Growth Centre, or have not yet resolved their plans. This creates difficulties in preparing precinct plans involving potential facilities that may require substantial sites. Support for these agencies to progress their planning appears to be required.
- While government agencies have traditionally provided facilities and services in isolation of each other, leading practice principles for sustainable communities demand that they come together to consider more innovative models based on principles of co-located or shared use of facilities and integrated service delivery. This requires leadership from an agency with a “whole of government” brief and “clout” to resolve inter-departmental barriers. There is a need for an integrated human service planning structure that will identify and negotiate proposals for joint use and co-located facilities and take the human service planning process forward. Options for a lead agency have been suggested.
- Community and cultural development strategies will be required in the precinct to help achieve social sustainability objectives. These should be viewed as an essential component of the baseline social infrastructure for the precinct, and their resourcing should be included within infrastructure planning agreements.
- Current guidelines from the Department of Natural Resources and the GCC Development Code preclude the embellishment of riparian corridors and conservation areas for passive recreation. The precinct contains substantial areas of such lands. The study recommends

that some of these areas be used for district level passive open space, thereby reducing the need for additional open space areas to be provided within developable land. The extent to which this might occur, and requirements and costs for embellishment of these areas, require further consideration.

- Further consideration is also required to determine if section 94 contributions should be levied for open space and facilities for employment lands and for regional level community facilities and open space embellishment.

The study has reviewed the draft Indicative Layout Plan for the Oran Park Precinct (as provided in February 2007) and identified a number of issues that will need to be addressed in the final ILP. Issues regarding community facilities include:

- the location of the high school and 1 of the primary schools to ensure they are central to their catchment zones,
- the size of the primary school sites, recognising they should not include playing fields, but may be co-located with other types of community facilities,
- the nature, distribution, location and areas for both multi-purpose community centres and childcare centres, recognising their importance in clustering to create focal points for the new community,
- the location of a youth facility and its potential co-location with the proposed recreation centre,
- the size of the site for district level community and cultural facilities, and
- The ILP will also need to demonstrate how requirements for local and district open space and recreation facilities will be satisfied.

Section 94 requirements for local and district level community facilities and local open space have been identified, based largely on extension of Camden Council's standards for its existing release areas. Requirements for district level open space are based on assessment of likely demand, rather than on conventional standards. Details of costings can be found within the draft Oran Park Precinct Section 94 Contributions Plan.

At this stage, the draft ILP is still in a state of flux and significant information regarding the intended provision of community facilities and open space has not been made available in time for the completion of this report. Accordingly, the draft ILP cannot be fairly assessed against the

objectives and criteria set out in the Growth Centres Development Code and other elements of the policy framework. However, the ILP has potential to be in accord with those objectives, in providing for a variety of facilities and open space broadly in response to the anticipated requirements of the future population. The town centre has identified sites for some major district level community facilities and contains commercial and mixed use space that may accommodate a variety of human services. The town centre facilities and open space have potential to become a major civic focal point for the surrounding area. Further assessment of the ILP will be required once the plan has been finalised. Further consideration of the Development Code and other objectives will need to be given in subsequent more detailed stages of the planning process.

The Oran Park Precinct is to be the first development in the South West Growth Centre and it will establish a benchmark and quality standard which may shape the level and standard of social infrastructure provision for the whole development. As such, it provides an important opportunity to establish a planning process and planning standards that will carry through to other precincts. This study has attempted to identify issues of significance for further consideration in the wider context, to enhance the precinct planning process and help ensure that appropriate social infrastructure and open space will be provided throughout the South West Growth Centre.

References

AUSTRALIAN BUREAU OF STATISTICS. *Participation in Sport and Physical Activity Survey*. 2004

CAMDEN COUNCIL 2005 *S94 Contribution Plan ERASS Survey*. 2005

DEPARTMENT OF PLANNING. *NSW Government's Metropolitan Strategy: City of Cities A Plan for Sydney's Future*. Department of Planning, December 2005

DEPARTMENT OF PLANNING. *Metropolitan Strategy Discussion Document 2004*

DEPARTMENT OF PLANNING. *Structure Plan for the South West Sector*. 2004

DUAP. *Urban Design Guidelines with Young People in Mind*. 1999

ELTON CONSULTING AND TANGENT LEISURE CONSULTANTS. *Oran Park Preliminary Community Planning Study*. Elton Consulting, August 2004

GROWTH CENTRES COMMISSION. *Development Code*. Growth Centres Commission, October 2006

NSW PARLIAMENT. *Parliamentary Enquiry into Children, Young People and the Built Environment* 2006

NSW GOVERNMENT. *NSW State Plan: Priority E8: More people using parks, sporting and recreational facilities, and participating in the arts and cultural activity*. 2006

NSW LEGISLATIVE ASSEMBLY. *Standing Committee Inquiry into Sportsground Management in NSW*. 2006

PlanningNSW. *Regional Recreation Demand and Opportunities Assessment Demand for Western Sydney* (includes the Camden, Campbelltown, Wollondilly and Liverpool LGA's). 2002

PROFILE I.D. *Camden Council 2001 and 1996 Census Community Profile*. i.d. consulting 2002

PROFILE I.D. *Harrington Park 2001 and 1996 Census Community Profile*. i.d. consulting 2002

PROFILE I.D. *Leppington/Rossmore/Catherine Field 2001 and 1996 Census Community Profile*. i.d. consulting 2002

SUPERGROUP. *Who Uses Sydney's Parks Research* 2003

Websites

Australian Bureau of Statistics
<http://www.abs.gov.au/>

Camden Council
<http://www.camden.nsw.gov.au/>

NSW Government's Metropolitan Strategy
<http://www.metrostrategy.nsw.gov.au/>

NSW Department of Planning
<http://www.planning.nsw.gov.au/index.asp>

Growth Centres Commission
<http://www.gcc.nsw.gov.au/>

Client
Growth Centres Commission

Project
Oran Park and Turner Road Precincts
Community Facilities and Open Space
Assessment

Appendix

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March 2007

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Appendix 1: Demographic Profiles of Selected Areas

The characteristics of the Oran Park and Turner Road precinct populations and similar sites around the study area have been examined and compared with those of Camden Local Government Area, the Macarthur Region¹, and metropolitan Sydney². The purpose of this comparison is to:

- Gain a better understanding of the current characteristics of the site and how it fits into the local and regional context.
- Assist in identifying potential impacts of future development within the study area on its existing population and people in adjoining areas.
- Assist in developing population projections, based on who is already being attracted to live in similar areas.

The Oran Park site was identified through an examination of existing Australian Bureau of Statistics Census collection districts (CDs). CDs are groups of approximately 225 households and make up the smallest unit of analysis available for Census data. For this study, a single CD (NSW CD 1291406) approximates the boundaries of the Oran Park site. CD 1291406 extends further north (to Bringelly Road), further east (to Allenby Road, Barry Avenue, Catherine Field Road and Springfield Road). It should be noted that the area covered by CD 1291406 which is outside the boundaries of the Oran Park site, houses much of the current area population which is reflected in the Census figures shown below. Although this collection district does not precisely correspond with the site, it is the best fit available and does provide a baseline for the Oran Park site and its immediate surrounds. CD 1291406 is shown in the tables below as Oran Park. Caution should be exercised in drawing extensive conclusions from data that is based on a single collection district. This data is presented here only to provide a baseline indication of the existing conditions of the area in which the site is located.

The Turner Road site forms part of the Leppington, Rossmore and Catherine Field area of analysis.

1.1 Population size

The population of each of the six areas in 1996 and 2001 is shown in Table 1.

Table 1: Population size

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur Region	Sydney
2001	1002	3102	4748	43,779	226,928	3,997,321
1996	969	2547	4474	32,045	209,295	3,717,417

Table 1 shows that the Camden LGA has undergone very significant growth between 1996 and 2001 with an increase of 11,734 people or 36.6%. Much of this increase can be attributed to new estate development in the area. In contrast, Oran Park's population increased by 33 people or 3.4%. As Oran Park is a much smaller area (21.7 km² contrasted to Camden's 201.3 km²) a lesser number and rate of population increase is expected. However, the very small increase does suggest that Oran Park is a very stable area which has witnessed little redevelopment or change in the five year period from 1996-2001.

Harrington Park has grown significantly by 555 people or 21.8%, this is as a result of the occupation of the new housing development by a large number of young families. The Leppington/Rossmore/Catherine Field area had a smaller population increase of 274 people or 6.1%. This slow growth is similar to that experienced in Oran Park and reflects the similarities of little new development and the stability of this largely rural residential area.

¹ This area equates to the Outer South Western Sydney Statistical Division and includes Camden, Campbelltown and Wollondilly Local Governments Areas.

² The ABS defined Sydney Major Statistical Region is used for this data.

As a comparison, for the Macarthur region the numerical increase was 17,633 representing a percentage increase of 8.4%. For Sydney, the numerical increase was 279,904 representing a percentage increase of 7.5%.

1.2 Age profile

Table 2: Age structure by proportion of the population 2001 (Excludes visitors)

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Age	%	%	%	%	%	%
0-4	5.8	12.5	6.3	9.1	8.2	6.7
5-11	11.8	13.5	10.0	12.5	12.6	9.5
12-17	12.7	8.6	10.1	9.3	10.7	8.0
18-24	10.8	8.0	10.2	8.7	10.1	9.9
25-34	11.6	20.3	13.3	17.4	14.6	16.0
35-49	24.7	24.1	21.1	22.5	23.1	22.6
50-59	14.7	7.3	14.4	10.0	11.0	11.4
60-69	5.0	3.6	8.5	5.1	5.2	7.1
70+	2.9	1.9	6.2	5.4	4.7	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

The age profile of each area is shown in Table 2 above. Key findings are:

- Oran Park has the lowest proportion of children in the 0-4 age group overall. Harrington Park has by far the highest percentage at 12.5% for 0-4 and 13.5% for ages 5-11 which indicates young couples moving into the new housing estate and starting families.
- Oran Park and the Leppington area have a lesser proportion of children in the 5-11 age groups than Camden. However, in comparison to Sydney the differential is less, with Oran Park actually showing more children in the 5-11 age group than Sydney. This suggests that Oran Park is a more established area than other parts of Camden and the Macarthur area with proportionally fewer families with younger children.
- Oran Park has a higher proportion of both 12-17 and 18-24 year olds. This is somewhat greater than Macarthur and significantly greater than both Camden and Sydney.
- The 25-34 age group is something of an anomaly for Oran Park and the Leppington area which have significantly less representation in this age group than the other areas. One possible explanation is the lack of first homebuyer, entry level home ownership or rental opportunities in this small area as compared to the other larger areas.
- The 35-49 and 50-59 year age groups are well-represented in Oran Park with greater proportional representation than all other areas. This reinforces the characterisation of the area as an established area with older families.
- In contrast the newer developments in Harrington Park have significantly fewer residents aged over 50 as often there is a lack of suitable housing options, or facilities and services for older people.
- The 60-69 and 70+ age groups are less represented in Oran Park than other areas, with the biggest differential occurring in the comparison with Sydney. While the 60-69 age group in Oran Park is lower than the Sydney average, it is consistent with Camden and Macarthur; however, the 70+ age group is much lower in Oran Park and Harrington Park than all other areas.

Generally speaking the age profile of Oran Park and the Turner Road shows a comparatively lower proportion of 0-11 year olds, a higher proportion of youth and young adults (12-24 year olds), significantly less 25-34 year olds, a higher proportional representation of 35-59 year olds, and lower representation for 60+ age groups. These figures demonstrate the relative stability of established families in the area, but limited employment options, social attractors or services for young couples.

1.3 Families and households

Table 3: Family type 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Family Type	%	%	%	%	%	%
Couple with children	75.0	60.1	50.8	48.1	70.4	36.6
Couple without children	10.4	23.8	23.7	24.2	16.1	23.5
One parent families	9.3	7.2	7.9	10.5	5.7	10.9
Other family household	0.3	3.2	1.2	2.1	0.7	3.1
Lone person household	3.6	4.6	14.2	13.1	5.5	21.6
Group household	1.4	1.1	2.1	2.0	1.6	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 3 shows a greater proportion of couples with children in Oran Park, Harrington Park and Macarthur, compared to Camden and Sydney. Of these areas Oran Park contains the highest proportions of couple with children families at 75.0%. This is considerably higher than the Macarthur and Sydney averages of 70.4% and 36.6% respectively. There is a corresponding reversal of this trend for couple without children families. One parent families are more prominent in Camden (10.5%) and Sydney (10.9%) than all other areas. These figures reflect the traditional popularity and affordability of south-western Sydney for families with children and the greater diversity of lifestyles and living arrangements that exist in other parts of Sydney.

1.4 Cultural and Linguistic Diversity

Table 4: Place of birth

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Born in Australia	79.6	80.1	71.9	83.4	77.2	66.6
Born Overseas	20.3	19.9	28.1	16.6	22.8	33.4

Table 4 shows that almost 80% of the population of Oran Park were Australian born. This is similar to Harrington Park and marginally higher than the Leppington area. The figures for Oran Park are slightly lower than Camden, slightly higher than Macarthur and considerably higher than Sydney. This demonstrates established families within the Oran Park area and limited cultural diversity of residents moving into the new residential estates.

Table 5: Language spoken at home

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Speaks English only	79.7	89.5	68.6	91.2	84.2	70.7
Speaks language other than English at home	20.3	7.8	31.4	8.8	15.8	29.3

Table 5 shows the high proportions of people who speak English only in Camden, Harrington Park and Macarthur. Oran Park has a lower proportion with 79.7%, Sydney lower again with 70.7%, with the Leppington area demonstrating the lowest figure at 68.6%

Further analysis of this data shows that:

- The majority of migrants of non English speaking background arrived in Australia before 1986 and so are not recent arrivals, and
- The main non English speaking countries from which residents of Camden as a whole have come are Italy, China, Germany and Malta. In Harrington Park the main countries represented are Italy, India, Philippines, and Germany, while in the semi-rural areas the main countries are Italy, Malta, the Netherlands and Greece. In addition to the languages of these countries, Spanish is spoken by a small but significant number of people in each area.

The numbers of residents of Aboriginal or Torres Strait Islander background living in Camden LGA are very low. In 2001, there were 525 people (1.2% of the population) who identified in this way. The Oran Park figures only recorded 9 people (0.1% of the population).

1.5 Income

Table 6: Weekly household income by total households 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
\$0-\$399	10.0	4.6	15.3	11.5	15.6	16.9
\$400-\$699	15.3	7.9	15.3	12.9	15.7	15.1
\$700-\$999	13.5	11.9	14.0	13.3	14.5	12.6
\$1,000-\$ 1,499	17.4	24.4	17.8	22.1	11.0	16.6
\$1,500-\$1,999	12.8	23.3	11.8	16.6	12.7	13.3
\$2,000 or more	16.7	18.3	11.4	12.7	9.4	13.8
All incomes not stated	14.2	9.5	14.1	10.9	11.9	11.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 6 above shows that compared with Sydney as a whole, Camden has a greater proportion of high income households and a lesser share at the lower income end. More than half of all Camden households have a higher income than the average for Sydney.

The table also shows that the pattern for Oran Park is somewhat mixed. Oran Park has a greater concentration of high income households (\$2,000 week and above) than the rest of Camden reflecting a degree of affluence and perhaps exclusivity. Oran Park also has a lower representation than Camden in the lowest income bracket (\$0-399) but higher representations in the \$400-999 range. The Leppington area demonstrates high representation in the lower income brackets (\$0-699) and much lower numbers of people in the higher income brackets (\$1,500 per week and above).

In contrast Harrington Park has the greatest concentration of population in the highest income brackets of \$1,000 and above. This reflects the prestige nature of the recent residential estate development and associated income bracket required to reflect the relative high cost of housing.

1.6 Employment

Table 7: Employment status 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Employed:						
Full-time	63.1	67.8	63.6	65.5	62.8	63.5
Part-time	27.8	25.8	26.3	27.5	27.0	27.5
Not stated	4.0	2.9	4.9	2.9	3.2	2.9
<i>Total</i>	<i>95.0</i>	<i>96.5</i>	<i>94.9</i>	<i>95.9</i>	<i>93.0</i>	<i>93.9</i>
Unemployed	5.0	3.5	5.1	4.1	7.0	6.1
Total labour force	100.0	100.0	100.0	100.0	100.0	100.0
Total in labour force	69.2	78.6	78.6	70.1	55.8	61.4
Total not in labour force	26.4	20.1	20.1	27.2	39.9	33.4

*calculated as a percentage of the total labour force.

Table 7 above shows that Harrington Park, Camden, Oran Park and the Leppington area have a higher proportion of their populations employed than both Sydney and Macarthur. Unemployment rates in 2001 were

correspondingly lower than the Sydney average significantly so in Harrington Park, with Macarthur recording the highest unemployment rate of the areas.

The table also shows that Harrington Park, Camden, Oran Park and the Leppington area have similarly high levels of participation in the labour force indicating a very high proportion of families with two parents working. The Macarthur area has the lowest participation rate by far at just 55.8% of the population.

Table 8: Occupation 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Occupation	%	%	%	%	%	%
Managers and Administrators	11.4	10.0	14.8	8.8	6.6	9.0
Professionals	9.6	13.9	9.2	14.9	12.7	21.2
Associate Professionals	7.6	13.7	8.5	11.6	10.5	11.8
Tradespersons and Related Workers	16.6	12.6	16.5	14.5	14.6	11.1
Clerical, Sales and Service Workers	32.0	35.9	28.7	32.1	33.3	30.8
Production and Transport Workers	12.2	7.6	11.4	9.9	11.6	7.4
Labourers and Related Workers	9.2	4.5	8.6	6.5	8.8	6.6
Inadequately described / Not stated	1.2	1.7	2.4	1.7	2.0	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 8 above outlines the occupations of the workforce across the six areas. The Leppington area (14.8%) and Oran Park (11.4%) have a higher proportion of its workforce classified as Managers and Administrators than the other areas. Oran Park also has higher proportions of Tradespersons and related workers and Production and Transport Workers. Conversely, the representation of Professionals in Oran Park and Leppington area is lower than all other areas and significantly lower than Sydney (9.6% in Oran Park and 9.2% Leppington compared to 21.2% for Sydney).

Harrington Park has the lowest proportion of persons working as labourers and in related fields, and lower numbers employed in trades than the other western suburbs. This area shows very high levels of numbers of people working as Professionals or Associate Professionals compared to the other areas examined in the south west. This again reinforces the type of resident that the new development attracts.

Table 9: Industry type

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
Industry type	%	%	%	%	%	%
Agriculture, forestry, fishing, mining	8.9	0.9	8.6	2.3	1.8	0.7
Manufacturing	10.6	15.4	13.4	14.2	16.4	12.2
Electricity, gas, water	0.0	0.4	0.2	0.6	0.7	0.6
Construction	14.6	8.0	13.2	9.6	8.4	6.9
Wholesale/retail trade	7.9	24.8	23.5	21.9	6.0	19.4
Transport and storage	14.6	5.9	7.9	6.5	15.0	5.0
Communication services	1.8	1.3	1.1	1.8	3.7	2.4
Finance, insurance, business services	7.7	16.1	11.6	12.9	6.1	20.6
Public admin and defence	0.6	3.0	1.8	3.1	2.0	3.4
Education, health, community services	3.7	13.7	8.7	15.8	4.5	15.3
Recreation, personal services	11.0	9.1	7.3	9.3	9.1	11.1
Not classifiable, not stated	2.8	1.3	2.7	2.1	3.5	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 9 above outlines the type of industry that the population is employed in. The table shows that Oran Park and the Leppington area have greater representation in Agriculture, forestry, fishing and mining, Construction and Transport and storage. This reflects the rural residential nature of the area. The table also shows that Oran Park has lower representations in wholesale/retail trade; finance, insurance, business services; and education, health, community services, whilst conversely Harrington Park has high representations in these classifications.

The low representation in some classifications also demonstrates the limited employment opportunities within the immediate locality.

1.7 Education

Table 10: Level of education 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Bachelor or higher Degree	5.9	7.8	4.9	8.2	7.7	15.2
Advanced Diploma and Diploma	6.1	8.5	4.5	7.4	5.1	8.2
Vocational Certificate	23.2	23.5	20.5	21.3	18.8	15.3
No qualifications	55.4	52.4	58.9	53.5	56.9	48.7
Not stated	9.5	7.9	11.3	9.6	11.5	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 10 shows that Oran Park and the Leppington area have a lower representation in the higher qualifications, especially Bachelor or higher degree recipients. Oran Park has a higher proportion with vocational certificates and Leppington has the highest proportion overall with no qualifications.

Overall the south west area demonstrates significantly lower educational levels when compared with the Sydney metropolitan area.

Table 11: Type of educational institution attended

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Pre-school	1.2	2.7	1.4	2.3	1.9	1.5
Primary school	10.2	13.4	9.2	11.9	11.7	8.7
Secondary – government	6.6	3.3	4.4	4.8	5.8	3.9
Secondary - independent	4.6	3.3	4.0	2.8	2.8	2.8
<i>Secondary total</i>	<i>11.1</i>	<i>6.6</i>	<i>8.4</i>	<i>7.7</i>	<i>8.6</i>	<i>6.7</i>
TAFE	3.1	2.5	2.4	2.4	2.9	3.0
University	2.2	1.9	2.2	2.4	2.3	4.3
Other	0.9	0.6	0.5	0.5	0.6	1.0
Not attending	67.1	70.3	71.0	69.5	67.2	68.9
Not stated	4.2	2.0	5.0	3.4	4.7	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 11 shows that Oran Park has higher representations in both government secondary schools and independent secondary schools than the other areas examined. The suburbs of Oran Park, Harrington Park and the Leppington area show higher attendance at independent secondary schools than the wider region and Sydney metropolitan area. This demonstrates high levels of local attendance at existing schools adjacent to the precincts such as the Macarthur Anglican School and St Gregory's.

Oran Park also has a slightly higher proportion of its residents attending TAFE than other areas. The table also shows Oran Park has lower representation in people not attending any institution.

Harrington Park has higher proportions of children attending pre-school and primary schools reflecting the number of young families who have settled in the new residential development.

1.8 Computer use

Table 12: Computer use

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Total computer users	40.1	50.6	35.7	45.3	41.3	43.7
Total non computer users	57.3	48.0	61.0	52.2	55.0	51.3
Not stated	2.5	1.3	3.3	2.5	3.7	4.9
Uses internet	31.1	41.9	27.9	36.2	32.9	40.5
Do not use internet	64.6	55.4	67.4	60.6	62.2	53.9
Not stated	3.5	2.7	4.7	3.3	4.5	5.5

*calculated as a percentage of the total labour force.

Table 12 shows that Oran Park and the Leppington area have the lowest usage rate for both computer and internet compared to the other areas. This may reflect low levels of home computer ownership, occupation and limited public access in the locality. Harrington Park has the overall highest computer usage at 50.6% followed by Camden with 45.3%; and correspondingly Harrington Park has the highest internet usage with 41.9% of population.

1.9 Housing

Table 13: Housing type as a proportion of all dwellings 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Separate House	91.3	99.6	89.6	91.9	84.4	63.1
Semi-detached / terrace house	4.5	0.4	2.0	5.4	12.4	11.3
Flat / Unit / Apartment	3.1	0.0	1.4	1.3	2.1	23.9
Other	0	0.0	6.4	1.2	0.5	0.8
Not stated	1.0	0.0	0.6	0.2	0.6	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

For Oran Park n=289

Harrington Park demonstrates the least diversity in housing type of all the areas studied, the new residential estates are characterised by separate houses. At 99.6% of the housing stock, practically the whole of the new developments are separate houses.

Oran Park and Camden, and to a lesser extent Macarthur, have a considerably larger proportion of their dwelling stock that are separate houses than Sydney. Semi-detached/terrace and flat/unit/apartment are correspondingly lower. These figures highlight the predominance of separate detached dwellings in the Camden area and suggest that the type of development proposed at the Oran Park and Turner Road precincts represents a significant departure from conventional development of the area and a much needed opportunity for further social diversification.

Table 14: Housing tenure as a proportion of all private dwellings 2001

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
Fully owned or being purchased	72.3	82.6	75.3	76.0	67.5	62.7
Rented	15.2	13.7	15.2	17.8	25.1	29.0
Other	6.6	1.9	4.4	2.8	2.0	2.4
Not stated	4.8	1.9	5.0	3.3	4.4	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Related to the previous table, Table 14 shows that the suburbs and Camden LGA have a higher proportion of owned or purchased dwellings and a corresponding lack of rental dwellings. Harrington Park in particular demonstrates a very high level of home ownership at 82.6%. The high figures in Oran Park and the Leppington area indicate the established properties and families who have remained in the area for a considerable time. The high ownership figures show less occurrence of social housing provision within the suburban areas.

1.10 Car ownership

Table 15: Car ownership

	Oran Park	Harrington Park	Leppington/ Rossmore / Catherine Field	Camden LGA	Macarthur region	Sydney
	%	%	%	%	%	%
No vehicle	2.4	1.7	4.0	4.3	8.6	13.1
1 vehicle	19.2	20.6	24.9	29.1	35.5	38.6
2 vehicles	32.5	58.6	32.8	44.6	35.4	29.5
3 or more vehicles	39.0	16.6	33.5	17.9	14.5	10.7
Not stated	6.8	2.5	4.8	4.1	6.0	8.2
total	100.0	100.0	100.0	100.0	100.0	100.0

*calculated as a percentage of the total labour force
For Oran Park n=292

Table 15 shows that, compared to the Sydney average the western suburbs and region are relatively car dominated or car dependent areas. This is demonstrated by the relative isolation and distance of the suburbs from major centres, and the corresponding lack of public transport options. It is interesting to note that 39% of households in Oran Park have 3 or more vehicles, compared to 17.9% in Camden and 10.7% in Sydney. An anomaly is Harrington Park with 16.6% of households having 3 or more vehicles; this suggests that the occupants are younger families with two adults rather than a number of adults in the home.

Appendix 2: Outline of Relevant Policies

The study has reviewed relevant planning policies, including the following from Camden Council:

- Camden 2025: A Strategic Plan for Camden
- Camden Council Community Plan (2004/9)
- Camden Council Community Well Being Policy (2003)
- Sustainability Indicators (2003)
- Children & Families Strategic Plan (2005-2010)
- Youth Strategic Plan (2005-2010)

Key issues from these documents which inform the social objectives and social sustainability strategies for the Oran Park and Turner Road Precincts are summarised below.

Other relevant policies included in the review are:

- Standing Committee Inquiry into Sportsground Management in NSW (2006)
- NSW Parliamentary Enquiry into Children, Young People And The Built Environment (2006)
- Urban Design Guidelines with Young People In Mind DUAP (1999)
- Promoting Healthy Ageing in Australia (2003)

2.1 Camden 2025: A Strategic Plan for Camden

Camden 2025: A Strategic Plan for Camden provides a framework for identifying the social objectives for the proposed development. It identifies managing growth as a key strategic issue for Camden Council, with one of the primary goals being to “manage growth to achieve inclusive, sustainable communities.” The Strategic Plan writes that:

Given the rapid growth, our challenge will be to ensure that the communities can be balanced and sustainable over time. We should develop community profiles that are socio-economically diverse and characterised by a range of incomes and age profiles, not merely mono-cultural suburban subdivisions divorced from facilities and recreational opportunities.

Key social objectives from the Strategic Plan that will need to be applied to the proposed development include the following:

Urban Development Objectives

To manage urban development to ensure:

- The traditional qualities of the Camden area are conserved and enhanced;
- Camden’s landscape setting and heritage values are retained and enhanced;
- Camden’s cultures and lifestyles are preserved;
- Appropriate service infrastructure is provided;
- Sustainable communities are created. This includes achieving socio-economic and age mix to create a diverse and balanced community;
- Integration of new and established communities, with developments based on a closed environment and lifestyle to be avoided.

Accessibility Objectives

These are designed to reduce physical barriers to ensure:

- Accessibility is improved to ensure all residents have reasonable access to work, education, recreation and community resources;
- There is increased permeability and connectivity within settlements and minimization of travel distances;
- There is a diversity of means of conveniently accessing Camden’s places and the broader Sydney region, thereby reducing dependence on private motor vehicles.

Economic and Community Development Objectives

To provide opportunities for all residents to embrace Camden’s culture and sense of community by:

- Promoting a variety of lifestyle options;
- Improving the well-being of the community by ensuring access to a range of facilities and services;
- Recognising and supporting cultural diversity;
- Providing quality urban and landscape design to enhance quality of life and community safety;
- Developing landscapes and infrastructure which promote a sense of community and local identity and provide public space conducive to the cultural life of the community.

2.2 Camden Community Plan (2004-2009)

Camden's Community Plan is seen as a whole of Council and whole of community approach to planning for the Camden community and is closely aligned with Council's 2025 Vision document. The Community Plan is to guide the future planning and development of services that contribute to the health and wellbeing of residents, as well as the provision of support, facilitation and co-ordination to established services and networks of importance to the community. The Plan has been based on extensive consultation with residents and service providers, and reflects the concerns and priorities they identified.

Key pressures, challenges and opportunities are highlighted that affect existing community wellbeing and these are structured into 8 key components. They read:

1. Accessibility – This component describes movement and ability to acquire both tangible and intangible goods and services.

Key outcomes focus on the need to: provide increased access to community facilities; facilitate access to a broad range of child care choices; establish purpose built children and family centres in new release areas; improve opportunities to utilize a diverse range of transport options; and continue to monitor and implement existing plans and policies that relate to improving access and connectivity.

2. Arts & Culture – This encompasses aspects of social, cultural and economic environments; civic institutions and community activities; social values, beliefs and ethics; language, local diversity and distinctiveness.

Key outcomes include: develop and identify venues and facilities that are appropriate for cultural activities; inclusion of Community Cultural Development principles in the masterplanning of areas; need for more cultural diversity and greater opportunities for young people; and increase identity within and linkages between Camden's suburbs.

3. Community Safety – This encompasses real and perceived hazards including avoidable accidents, crime, anti-social behaviour and natural disasters.

Key outcomes include: implement principles of Safer By Design within communities; develop and implement initiatives to decrease vandalism, graffiti and anti-social behaviour; develop programs that promote good neighbourhood relations within existing and new release areas; and, ensure police involvement in the planning of new developments where developments may increase factors of crime.

4. Economic Development – this includes factors that contribute to sustained prosperity, wealth and financial wellbeing of the community.

Key outcomes include: development of strategies to attract a range of skilled/professional people to work in the area; ensure Camden's tourism and visitor opportunities are easily identifiable; create brand identities for all facets of Camden's tourism and visitor appeal.

5. Healthy Lifestyles and Community Health – this entails issues that affect emotional, physical, social and environmental wellbeing and people's way of life.

Key outcomes include: improve accessibility and quality of health services; facilities are provided in isolated areas that allow for outreach health and lifestyle services to be provided to general community; improve support services for families.

6. Housing and Urban Environment – This refers to development of housing, open space and facilities and their relationship to the environment. Camden is undergoing intense development and the issue of housing and the urban environment needs to be underpinned by good urban design and planning to have positive social impacts.

Key outcomes include: ensure all developments adhere to key principles of good urban design; ensure children are provided with quality physical environments and places for learning; ensure masterplanning accommodates choices in housing design and sustainable lower cost housing stock and housing stock to accommodate projected demographic profile; increase initiatives for alternative accommodation; ensure open space and community facilities reflect demography of the area; develop and implement masterplanning best practice model to facilitate infrastructure and service provision; ensure new development incorporates principles of ESD.

7. Lifelong Learning – refers to the continuation of personal growth and continued enhancement of knowledge throughout ones lifespan both formal and informal sources.

Key outcomes include: childcare facilities meet the needs of Camden community; increase support for learning opportunities of young people.

8. Recreation & Leisure – refers to interactions between people, with opportunities that are informal or formal, active or passive and involve a range of activities and services.

Key outcomes include: provide a range of appropriate spaces for the provision of youth services and activities that reflect youth culture; provide footpaths and cycleways; provide activities for young families.

2.3 Camden Council Community Well Being Policy (2003)

Although the Community Plan provides the lead strategic document in relation to achievement of community well being (social sustainability), Council adopted a Community Well Being Policy in 2003 which recognized the importance of social sustainability and developed interrelated principles that underpinned community well being. The Policy strengthens Council's emphasis on the social aspects of sustainability in Camden. The Policy states:

"Camden Council is committed to enhancing and building the well being of its community, vital for long term sustainability. A sustainable community seeks a better quality of life for everyone – now and in the future – by creating supportive communities where there are adequate work, health and recreation opportunities, by protecting and enhancing the environment, and by managing local resources to improve economic prosperity".

The Community Wellbeing Policy states that social sustainability (community well-being) will be advanced in Camden by developing and promoting four underlying principles:

- Social justice – social justice is the achievement of equal access to power, resources, information, opportunities, participation, choices and outcomes.
- Social capital – social capital is "community connectedness," the extent to which people are involved with other people in social networks and relationships that are characterised by norms of trust and reciprocity, and lead to mutually beneficial outcomes. Social capital is associated with feelings of belonging in the community, and with opportunities to contribute to the community and participate in local networks and organisations.
- Governance – good local governance exists where there is a strong, democratically elected and pro-active council, dedicated to the interests and progress of the community.
- Active citizenship and participation – active citizenship is about making contributions to the community. It is about being informed, participating, creating ownership of community issues, safety and security, and providing local solutions to local issues.

Policy objectives of Council to promote community well-being in Camden which are relevant to this study include:

- Encouraging and supporting developments that promote and enhance community well being, inclusion and cohesion;
- Developing a vibrant and culturally thriving community life that encourages maximum participation in and ownership of activities and events;
- Developing and supporting initiatives that celebrate difference and cultural diversity;
- Designing and building open space and community facilities that encourage interaction and wide use within the community by being safe, friendly, vibrant and functional for a wide range of uses;
- Designing the built environment in ways that promote and enhance the quality of life of the community and have regard for community safety, accessibility and the health of the community.

2.4 Camden Council Sustainability Indicators (2003)

In 2003 Council developed a series of sustainability indicators to ensure that strategies are focused towards sustainability and as a means of measuring Camden's progress towards sustainability. Indicators relating to community development include:

Camden is sustainable if:

- People feel safe
- People feel they belong
- People are healthy
- There is a commitment to learning
- People have the jobs they want
- There are housing choices
- I can obtain what I need

- There is community pride
- I have a say in Camden's future

2.5 Camden Council Children & Families Strategic Plan (2005-2010)

This plan aims to promote opportunities and environments that will optimize children's development and support families in their roles in the community. The plan anticipates the rapid growth that Camden will experience in the coming years and the demands on families, services and the community that will result. Hence more broadly this plan explores facilities, programs, and support networks available.

The plan's vision includes:

- Children and families are valued and represent a significant proportion of our population both now and in the future;
- The community supports children as they grow and learn in their transition through different life stages;
- The natural environment is designed to encourage and promote a healthy lifestyle and physical and incidental activity;
- Local neighbourhoods and precincts are visually appealing and environmentally sensitive with an integrated system of walkways and bike paths;
- There is a range of support services and programs that families can access locally.

The key results of the Plan focus on four of the eight components that are identified in the Community Plan (see Section 4.1.3). The key points pertaining to the proposed development are as follows:

Accessibility – An Accessible Community:

- Centre based childcare centres are well designed, providing children with quality physical environments and places for learning;
- Planning and design of community facilities involves stakeholder and community input;
- Disability family friendly principles are included when developing new areas.

Health – An Active & Healthy Community:

- Support and encourage opportunities for children and families to lead active healthy lifestyles by providing a range of physical activities, events and programs.

Recreation & Leisure – A Fun Community:

- There are services, facilities and activities planned and provided with the Council framework.

Community Safety: A Safe Community:

- Promote safe usable neighbourhoods.

2.6 Camden Council Youth Strategic Plan (2005-2010)

The Plan is seen to complement the Community Plan. It sees the need for young people to be provided with opportunities and be given the ability to participate in community life. The vision states that young people living in the Camden local government area will have:

- Greater opportunities to participate in the life of the community;
- Appropriate and accessible recreation, education, training and employment opportunities;
- Support in their transition in adulthood;
- Access to safe public spaces where they can legitimately be;
- Regular, accessible and affordable transport options to enable them to lead complete and independent lives; and
- A sense of belonging and ownership as they are engaged in community life.

The key issues and outcomes facing young people follow along the same structure as the Community Plan. Key issues and outcomes include the following:

Accessibility – poor levels of public transport; need for increased provision and diversity of youth services; improve future design of facilities that welcome young people.

Community Safety – lack of youth friendly public places; promote safe usable neighbourhoods; apply Crime Prevention Through Economic Development (CPTED) principles in assessing applications for civic and recreational buildings.

Employment & Economic Development – Need to enhance future provision of local employment opportunities for young people.

Health – need to improve access to health facilities and provide greater support for families.

Housing – access to affordable and a variety of housing types and need to overcome issue of high housing cost to allow more people to access housing.

Life Long Learning – need to enhance opportunities in area for education and support; encourage young people to be involved in all stages of project development and youth activities.

Recreation & Leisure – create further opportunities for young people to exercise and socialize; maximize the use of parks and opens spaces with appropriate infrastructure in place for young people; provide more entertainment opportunities for young people.

Other Relevant Policies

Standing Committee Inquiry into Sportsground Management in NSW (2006)

The report of the Inquiry was released in November 2006. The report is timely, and contains many recommendations that can guide the planning of open space and recreation opportunities for the SW Sector.

“...continuing and future access to sustainable sportsgrounds and open space recreation facilities is under threat in New South Wales. Uncoordinated planning, disparate management practices and a lack of consistent data collection are compounding an already precarious situation and preventing active community sporting participation”...“One of the core issues underpinning the precarious state of sportsgrounds in NSW is the failure to anticipate and plan for changes. Such changes include greater community participation in active recreation, population shifts from rural to urban areas, increased housing density and environmental consequences of increased use of facilities.”

The Committee has concluded that because the current distribution of sportsgrounds in NSW has evolved historically, there is a lack of consistency in the provision of facilities across council areas. This means that planning for sportsgrounds in the future requires a more strategic focus than in the past. Incremental planning on single release areas leads to a lack of opportunity for training, an inability to accommodate emerging sports and a failure to put into practice Federal and State government campaign strategies to improve general community health and well being”.

The Committee recommended that the Department of Education and Training develops a Memorandum of Understanding (MOU) with local government, to facilitate joint arrangements between school principals and local councils in relation to the use of school grounds for community sporting activities. Such arrangements would have to take account of practical issues related to shared maintenance costs, security, safety and public liability.

Consideration of our physical and social changes and needs as we move through the lifecycle stresses consideration of the concept of ‘age-friendly’ built environments. This can make neighbourhoods more liveable for all ages, reduce costs associated with health and aged care and yield a range of social and economic benefits by extending and expanding seniors’ contribution to community life.

NSW Parliamentary Enquiry into Children, Young People And The Built Environment (2006)

As SW Sydney’s built environment continues to be transformed through population growth, urbanisation, reliance on the motor vehicle and planning reforms. Balancing the needs of children and young people with those of other members of the community is a difficult, but important task. Failure to recognise the diverse needs of children and young people can have deleterious consequences. As Perry (2006) notes:

“Physical environmental features are a factor in the rising rates of overweight and obese children; ...diminishing public space and play spaces inhibits development of motor skills and social interaction”.

One of the key recommendations of this Enquiry was the need for the Growth Centres Commission to take into consideration the needs of children and young people into account in the development of Sydney’s new growth areas. (p.59)

Play is crucial for many aspects of children’s development, from the acquisition of social skills, experimentation and the confrontation and resolution of emotional crises, to moral understanding, cognitive skills such as language and comprehension, and obviously physical skills. The local recreation ground or park can become a ‘multi use

centre' catering to the formal and informal needs of both children and young people. However, this is only likely to be achieved if a range of facilities (play areas, skating area, kickabout area, youth shelter, cycle track, etc) are provided to meet and challenge children's and young people's cognitive and physical development.

Urban Design Guidelines with Young People In Mind DUAP (1999)

Camden Council in its Strategic Plan and Youth Plan acknowledges the need to increase leisure opportunities for young people in the area. Open space areas provide opportunities for young people to gain social independence, experience diversity, and develop responsibilities towards others. Lack of provision means that they gather in inappropriate places and their presence causes mistrust, as a result, they are designed out of opportunities to make unstructured use of public space in an attempt to manage perceived risks and promote spaces to appropriate niche markets. In this sense, the management of image through the development of highly sanitised, extensively regulated spaces can prove to be a barrier to the benefits associated with open space. The following guidelines developed by DUAP identify eight key principles for urban design with young people in mind:

- Getting there and around – maximising public transport routes and providing facilities for bike and skateboards will facilitate use of spaces by young people;
- Designing in all users – integrate, rather than segregating young people through the provision of wide spaces, seating for 'hanging out' and involvement young people in design discussions;
- Building liveliness – catering for a wide range of users through a mix of residential, retail, commercial and entertainment outlets / offers;
- Making safe places – adoption of crime prevention through environmental design principles to enhance perceived safety and increase activation and utilization of areas;
- The public stage: venues for self expression and public entertainment should be provided;
- Keeping public space public – maintenance of public spaces and avoidance of over-management through security guards and CCTV are recommended to retain public amenities;
- Separate but visible – provide conflict-generating activities separate, but within sight of other spaces;
- Basic services – provide basic services (toilets, public telephones) for young people to utilise.

Promoting Healthy Ageing in Australia (2003)

The ageing of Australia's population, attributable to increased longevity, falls in fertility and the maturing of the baby boomer generation, will present significant challenges in relation to the built environment - the buildings, structures and spaces in which we live, work and play. Low density urban development, a characteristic of many new suburbs is not particularly age-friendly. Features, such as dispersed development patterns, the lack of footpaths, separation of land uses and automobile dependency all present significant obstacles to the independence of seniors.

Walking is heavily influenced by the built environment, specifically streetscape design. Attention to accessible streets and streetscape amenities such as seats, shelter and road crossing can foster the mobility of older people and their participation in community life. Moreover, walking helps seniors maintain healthy lifestyles, notably physical activity which is essential for preventative health.

Nevertheless, good urban design can play a major role in allowing seniors to age in place and remain active - both physically active and active in their local communities. A safe pedestrian environment, with easy access to shopping centres, a mix of housing choices, nearby health centres and recreational facilities are all important elements that can positively affect the ageing experience.

In its submission to the Second World Assembly on Ageing in 2002, the World Health Organisation observed that age-friendly built environments can make the:

"...difference between independence and dependence for all individuals but are of particular importance for those growing older. For example, older people who live in an unsafe environment or areas with multiple physical barriers are less likely to get out and therefore more prone to isolation, depression, reduced fitness and increased mobility problems".

Further, a recent report to the Prime Minister's Science, Engineering and Innovation Council argued that:

"Consideration of the built environment is essential to the achievement of the vision of increased healthy life expectancy. The built environment has a powerful impact on mobility, independence, autonomy and quality of life in old age and can also facilitate or impede the quest for a healthy lifestyle at all ages".

Appendix 3: Existing Community Services and Facilities

Existing community facilities, human services, open space and recreation in the area surrounding the Oran Park and Turner Road Precincts have been identified and examined to assess:

- Their availability and accessibility for the incoming population
- Their suitability, and
- Their capacity to absorb demand that may be generated by the future community of the Oran Park Turner Road Precincts.

Some types of facilities and services have a local catchment, while others are provided on a district or regional level. Accordingly, the study areas selected for this assessment has varied according to the type of service or facility. The focus for local level services has been the areas immediately surrounding the precincts, while district level services have included all of Camden LGA, and regional services have considered the wider Macarthur Region. The assessment of local services has concentrated mostly on services and facilities to the south of the Oran Park site in the existing developed area of Camden LGA.

In summary, this assessment has found:

- The distribution of services across the Camden LGA is very dispersed, and this, together with the poor levels of public transport in the area, creates access difficulties, particularly for older people and young people
- Access to many services is generally determined by access to private vehicles
- Service development has not kept pace with rapid population growth and most types of services are overstretched
- There is very little spare capacity in local or district level facilities, especially family and children's services and community centres
- The needs of older people are often overlooked, given the predominance of families with children in the new release areas
- A particular need has been identified for more leisure and recreation opportunities for young people, and
- Camden has a high level of service for open space, however, this is due in part to recreation resources being provided on flood prone and ecologically significant lands.

An overview of issues associated with each type of service or facility is provided below.

3.1 Children's services

Twenty nine facilities were identified in the Camden LGA offering long daycare or pre-school for children in the 0-5 age cohort. Most of these centres are at full capacity or close to full capacity and many have extensive waiting lists. There is a particular shortage of places for children aged 0-2 years. The vacancies that do exist are generally limited to particular days or age groups, or in centres that are least attractive or accessible.

In addition to long daycare and pre-school facilities, there is also family day care, occasional care, before and after school care and vacation care services offered in various facilities across the LGA. These services are all heavily utilised. There is some spare capacity in some out of school hours care services, but these are not in locations readily accessible to the precincts.

A number of playgroups providing informal activities for young children and their parents operate from community centres across the Camden LGA. The closest playgroup to the Central Hills site meets at the Harrington Park Community Centre. It operates 3 groups (20 in each), 3 days per week and caters for 0-5 year olds. There are currently vacancies, however, rents have been increased by Camden Council which may undermine the future of the playgroups.

3.2 Education

In terms of public schools, the closest primary schools to the site are at Harrington Park, Cobbitty and Rossmore. The Harrington Park Primary School is still heading towards its anticipated peak, and so has some spare capacity at present. It currently has 553 enrolments and a reasonably stable enrolment pattern. Growth has been slower than anticipated, perhaps because the birth rate and proportion of young children have been less than forecast, or perhaps because a higher proportion of students than anticipated are attending private schools. It is anticipated that any spare capacity that currently exists will be completely absorbed by the completion of Harrington Park and the development of Harrington Park 2. Cobbitty Primary School is a very small, rural school on a small site

without the facilities to cope with population growth. The potential to upgrade this school will need to be examined. It is likely that any expansion of Cobbitty will be taken up by the development of the Mater Dei site. Rossmore is also a small school and has limited capacity for additional students in its current form.

In the wider area, Narellan Primary School has spare capacity and a declining enrolment pattern. However, it will be used to meet the needs of the anticipated Spring Farm population. A new small school is proposed for the infill development planned for Elderslie. Leppington Primary School is a small, rural school with a stable enrolment and limited spare capacity.

While some spare capacity currently exists in some of the surrounding secondary schools, such as Horningsea Park, Edmondson Park, Cecil Hills and Hoxton Park, it is anticipated that any capacity will be quickly filled with the development of new release areas already in progress. Developments such as Spring Farm, Harrington Park 2, Mater Dei, Edmondson Park and others are likely to account for any spare capacity at nearby secondary schools.

For Catholic schools, the closest primary schools are St Paul's in Camden and St Clare's at Narellan Vale. Both these schools are considered to have reached their maximum capacity and will be unable to absorb a large number of additional students. Similarly, the local Catholic high school, Magdalene College, at Narellan, is at capacity with a current enrolment of 940 students, and has waiting lists for some grades. All the Catholic schools in the area have expanded in recent years to accommodate new development, and the sites will not permit any further expansion.

Additionally, St. Gregory's Boys College is adjacent to the Turner Road Precinct. It offers day and boarding facilities for 1,100 students from Year 7 to Year 12. Currently there is a waiting list for Year 7 only, but the school is located in expansive grounds and future expansion should be possible if demand continues to grow.

The other key school in the area is the Macarthur Anglican School in Cobbitty Road, adjacent to the Oran Park Precinct. This school comprises a secondary and a primary school, with just over 1,000 enrolments for the two schools registered for 2005. It should be noted that enrolment numbers have slowed and there are currently no waiting lists. The school is located on a 120 acre property and given the size of the site, there is scope to expand both senior and junior components, should demand warrant it.

Further afield, the Mount Annan Christian College in Mt Annan and the Broughton Anglican College in Menangle Park both have significant spare capacity at present, along with plenty of land with potential for expansion. Both these schools operate from kindergarten to Year 12.

Tertiary education facilities are available at the Campbelltown Campus of the University of Western Sydney and at the Campbelltown campus of the South Western Institute of TAFE. Community education is available through Macarthur Community College at Campbelltown and Elderslie High Schools, while the Macarthur division of the University of the Third Age (continuing education for people aged over 50 years) is based at Camden.

3.3 Community Centres

Community centres provide space for a variety of local community activities, for community meetings, for sessional services and for private functions, such as birthday parties. They also provide a focal point for community development initiatives.

Community facilities are located at Harrington Park, Narellan, Mt Annan, Currans Hill and Catherine Field. These serve primarily a local community function and would have little relevance for a new population in the area.

The closest community centre is the Council-owned Catherine Field Community Hall which adjoins Catherine Field Reserve. The single room hall has seating capacity for approximately 110 people for meetings or any community events. The hall is not heavily used (it takes an average of 24 bookings/year) which indicates there is existing and future capacity. This reflects its age and lack of amenity.

North of the precincts in Leppington, the Leppington Progress Hall is run by the local Progress Association but is available for hire to the general public. Its size and standard is comparable to that of Catherine Field Community Hall, although there is no co-location of other community facilities i.e. sporting oval or reserve.

Other local community centres are located in Kearns and Raby within the Campbelltown LGA. The Kearns centre has seating capacity for 120 people and is consistently booked out for various community activities and events. The Raby Neighbourhood Centre is smaller in size, with seating capacity for 80 people. This centre is also well used, especially by church groups who do not have a church to accommodate their services. Both these centres, like all older style Campbelltown Council community centres, are in the process of undergoing refurbishment to improve the quality of their facilities.

The closest district level community facility is the Harrington Park Community Centre. This is heavily used by both the existing Harrington Park community and the wider community due to its size and location, and, given further development at Harrington Park, would not have capacity to absorb demand from development within the Growth Centres precincts as well. The Fairfax Reserve in Harrington Park also contains clubrooms which are available for hire by community groups and used for a variety of purposes.

Other Council multi-purpose community facilities are located at Narellan, Mt Annan, Currans Hill and Camden. With the exception to the Camden Civic Centre, these other centres serve primarily a local community function and would have little relevance for a new population in the study area. It should be noted that most of the public schools are also used significantly as venues for community activities.

Community centres are generally not staffed. It should also be noted that community centres within the housing estates are merely spaces for community activities and so are generally not staffed unless activities are taking place. The only community development worker funded in Camden LGA is based at the Camden Area Neighbourhood Centre in Narellan. This centre also provides a community information and referral service and community resources for the whole LGA. Lack of government funding for community development workers to work within areas of new development has been noted.

A key issue with regard to community centres is the need for sustainable maintenance and management arrangements. Currently the community facilities are managed directly by Camden Council.

3.4 Health Services

Publicly operated health services within Camden are primarily provided at Camden Hospital and Narellan Community Health Centre (CHC). The Narellan CHC provides early childhood health services, hearing clinics, multidisciplinary child, adolescent and family services, women's health clinics, child protection services, sexual assault services, community counselling, drug health, palliative care, a dental clinic for adults and children and health promotion. The centre also includes meeting rooms for seating up to 60 people, although this venue is available for community and health related meetings only. All the services at Narellan CHC are heavily utilised and the physical capacity of the building is reaching capacity. Staffing levels and hours of operation will need to be considered as a strategy to meet increasing demand on services.

A more comprehensive array of community based health services are provided in the Campbelltown LGA, although the majority of services provide for the Macarthur Region. These include community mental health services, Aboriginal Health and Multicultural Health.

Campbelltown Hospital is a major metropolitan hospital within the Macarthur region providing for the Campbelltown, Camden and Wollondilly LGAs and is closely networked with Camden Hospital. Campbelltown also has a private hospital. Liverpool Hospital is accessed for major tertiary and specialty services currently not provided at Campbelltown Hospital.

A range of non-government organisations, such as the WILMA Women's Health service complement the services provided by Sydney South West Area Health Service.

The closest private medical practitioners are located in the shopping centre within Harrington Park, Camden and Narellan. The new Macarthur Square shopping centre contains a medical and dental centre and number of medical practitioners.

3.5 Welfare and Support Services

Branches of Lifeline and the Salvation Army are located in the Narellan Town Centre, providing emergency assistance and support. There is also a branch of St Vincent de Paul, a Centrelink office and the Wollondilly/Camden Family Support Service in Camden. However, the bulk of services available to people in Camden are based in Campbelltown. These include the Department of Community Services Community Service Centre, the Macarthur Migrant Resource Centre, Centacare, Burnside, the Benevolent Society, disability support and accommodation services, and marriage and family counselling services.

3.6 Services for Older People

A number of aged care services to support older people living at home and their carers are provided in Camden. The Macarthur Aged Care and Rehabilitation Service is based at Camden Hospital and offers a range of outpatient services, along with allied health services such as podiatry. Broughton House, within the grounds of Camden Hospital, is the location for dementia specific centre based day care (with an outreach program provided at Warragamba), carer support services and the Macarthur Dementia Advisory Service, along with the Camden District Activity Centre. Narellan Congregational Services also provides a centre based service. All these services

are heavily utilised. Other services are based at Campbelltown, to service the whole of Macarthur. These centre/hospital based services are supported by an extensive range of in home support programs, such as meals on wheels, in-home respite and the transitional aged care program.

There are several accommodation complexes for older people in the Camden LGA. These primarily provide for self care accommodation. Residential aged care (both high and low care) is provided by Carrington Centennial Trust and Camden House.

Social and recreational activities for older people are provided at some community centres, including the Harrington Park Community Centre. Other popular places for activities for older people include church halls and the Senior Citizens' Centre in Camden.

Public transport in the Camden LGA is not frequent, particularly in the evenings. Nor is the transport provided equitably across the LGA. This lack of service may cause hardship and isolation for certain groups, such as older people. There are only two community based transport organisations in the area assisting older people and people with a disability, and their carers. These both cover the whole Macarthur region. An accessible taxi service is available.

3.7 Services for Young People

Only one youth centre with a youth worker is funded in Camden LGA and this is based at Mt Annan. It is acknowledged that this service is not very accessible for young people living in other parts of Camden, unless their parents drive them. There is a need for additional funding for youth workers who can organise activities for young people in local community centres.

A Scout hall is located in the Narellan Town Centre, but this used only by Scouts members. An RSL Youth Centre Hall is located in Camden, providing limited sporting and recreational activities for young people. There are a couple of youth groups run by churches in the Narellan area.

Specialist services for young people (health, accommodation, legal aid, employment, training, counselling) are available in Campbelltown, however access to these services is limited by transport.

3.8 Libraries and Cultural Facilities

Libraries are located at Camden and Narellan, with the central library at Narellan. A further branch library is planned for Mt Annan. A mobile library service is also provided. Council's Section 94 Contributions Plan makes provision for contributions from all new development towards the provision of library services, to ensure they keep pace with population growth.

Cultural facilities include the Camden Museum and gallery space for exhibitions at the Civic Centre. Council's halls and community centres are also used for cultural activities. Other facilities operated by private providers in the area include the Camden Museum of Aviation, Struggletown Fine Arts Complex in Narellan, Camden Society of Artists Gallery in Camden and The Stables art workshops, Wivenhoe. The recently opened Campbelltown Arts Centre provides a new focal point for arts activities in the Macarthur region.

A cinema complex is to be developed at Narellan, with additional cinemas in Campbelltown. A variety of other entertainment and leisure facilities, such as restaurants and pubs, are available in Narellan, Camden and Campbelltown.

Both the Camden Lakeside Golf Course and Camden Valley Golf Resort also contain function and conference facilities.

3.9 Emergency Services

The closest police and ambulance stations are located in Camden. Responsibility for providing fire services in the area is split between the NSW Fire Brigades, stationed in Smeaton Grange, and the NSW Rural Fire Service, based in Narellan. Responsibility for the undeveloped parts of the area rests with the Rural Fire Service with the likelihood of transfer to the NSW Fire Brigade when development occurs.

For all emergency services, the critical factor in servicing an area is the time required to respond to a call, a function of travel distance and road layout, rather than population or dwelling numbers. The Oran Park site is within reasonable range of emergency service bases, using Camden Valley Way and The Northern Road. Further input from the emergency services will be required once the access points and internal road layouts for the site have been determined.

3.10 Churches

The closest churches are located in Narellan, Camden and Cobbitty. It is noted that a number of churches and church groups use schools and community facilities as their meeting space, rather than have their own purpose built facility.

It is noted that a number of churches and church groups use schools and community facilities as their meeting space, rather than have their own purpose built facility. Harrington Park School is used by three different church organisations for services on Sundays, reflecting the lack of church facilities to address the needs of the local community.

3.11 Recreation and Open Space

Open space availability in the Camden local government area is considered to be reasonably high based on current population levels. This is due in part to recreation resources provided on land prone to flooding, and on ecologically significant areas. The range of regional and district level facilities available to Camden residents are:

Existing Regional Level Facilities

Kirkham Park
Oran Motor Racing Circuit
Macarthur Regional Hockey Centre
Softball Centre with 9 diamonds
Mt Annan Botanic Gardens (416ha)
William Howe Regional Park
Bicentennial Equestrian Park
Nepean River Cycleway
Ron Dine Memorial Reserve
Wivenhoe Stables- Art Gallery

Existing District Level Facilities

Ponderosa Reserve
Hayter Reserve
Onslow Park
Mt Annan Leisure Centre
Camden Lakeside Golf Course
Camden Bowling Club
Camden Showground
Gundungurra Reserve
Macarthur Sports Life Indoor Centre
Jack Nash Reserve
Camden Golf Course
Camden Valley Golf Course
Macarthur Grange Golf Course
Camden Outdoor Pool

Historically, and in line with Open Space Planning Guidelines produced by the former Department of Urban Affairs and Planning (1992), open space provision standards of 2.83 hectares per 1000 persons were applied to new release areas in Camden including Narellan, Camden Vale and Mt Annan. The current supply of recreation facilities has been largely determined by the Council's 1993 Recreation Study, which was based on a population base of 22,468 (1991 Census). This Study identified that recreation participation rates in Camden were higher than the NSW average. As a result, Camden Council increased its provision rates to 3.64 hectares per 1000 persons comprised of 3.24 hectares per 1000 persons for structured open space areas and 0.4 hectares per 1000 persons for unstructured open space areas.

Due to the rapid urban development of Camden many of the open space areas and recreation facilities have been provided, through developer's contributions or work in kind providing local parks and reserves through incremental residential subdivision. The current supply of recreation facilities is largely located to the south of the Camden local government area in line with the urban growth of Camden. It is not anticipated that the existing facilities would be able to accommodate the increased in demand from the projected population of Oran Park.

As illustrated by the mix of facilities outlined above Camden Council provides regional standard netball, softball and hockey facilities conversely indoor sports such as basketball, volleyball, gymnastics, badminton, table tennis at representative or club level rely on facilities provided in Campbelltown and Liverpool. The Alive indoor sports centre provided by the Uniting Church offers local competitions in basketball, volleyball, hockey, indoor cricket, netball and indoor soccer. The centre also offers daytime activities for schools and provides a skate park, which is very popular with young people. Apart from this facility there is an under provision in recreation opportunities for young people in the area.

In addition to sporting venues there is a high availability of and access to walking and cycling trails in the district, particularly along the Nepean River. Walking is the most popular 'non structured' form of leisure activity in this area. Existing district parks provide informal recreation opportunities with large grassed areas, mature trees, picnic areas, barbecues, playgrounds and activity areas.

3.12 Summary

In summary, this assessment of existing services and facilities has shown that:

- There is little potential for schools to meet the needs generated by the proposed development. Any existing capacity will be taken by other new release area developments such as Spring Farm and Harrington Park 2
- There is no available capacity in local childcare centres or pre-schools. There is a child care centre within the existing Harrington Park estate which will accommodate the maturing of that and surrounding populations
- There is very little spare capacity in existing community centres given their local neighbourhood focus
- There is little spare capacity in health, welfare and support services, which are already stretched coping with the rapid population growth which has occurred in the area
- Services in the area for young people are already inadequate and the development may further contribute to this situation
- Camden has a high level of service for open space, however, this is due in part to recreation resources being provided on flood prone and ecologically significant lands, and
- Cultural facilities and opportunities are also limited in the area.

Appendix 4: Population Projections: Supporting Information

Table 1: Average Persons per Dwelling Selected Areas 2001 Census

Dwelling type	Liverpool LGA	Campbelltown LGA	Prestons	Cecil Hills	Horningsea Park	Hoxton Park	Casula	Liverpool Rural Residential
Detached house	3.3	3.2	3.4	3.7	3.2	3.5	3.2	3.4
Semi-detached / terrace/townhouse	2.7	2.6	2.4	0	3.4	0	2.5	0
Apartment	2.3	1.6	0	0	0	0	1.6	0

Source: Elton Consulting Edmondson Park Community Planning Study, 2003

Table 2: Age Cohorts by % of Population 2001 Census

Age cohort (years)	New release areas SW Sydney settled since 1996	Older release areas SW Sydney settled since 1991	Liverpool LGA	Campbelltown LGA	Sydney Metro area
0-4	11.7	10.6	8.8	8	6.7
5-9	9.9	10.7	8.8	9	6.8
10-14	7.4	8.6	7.7	9	6.7
15-19	6.4	7.3	7.2	9	6.9
20-24	7.1	6.2	7.2	7.4	7.1
25-34	22.7	18.9	17.2	14	16.0
35-44	17.2	18.4	16.3	15.5	15.7
45-54	9.9	11.0	11.8	14.3	13.4
55-64	4.4	4.8	7.3	7.2	8.8
65+	3.2	3.3	7.3	6.2	11.9
Total	100	100	100	100	100

Source: Elton Consulting Edmondson Park Community Planning Study, 2003

Table 3: Forecast Age Distribution by Percentage of Population

Age cohort	Within 5 years of initial settlement	10 years after settlement	15 years after settlement
0-4	12	9	7
5-9	9	10	7
10-14	7	8	9
15-19	6	7	8
20-24	7	7	8
25-34	24	18	15
35-44	18	19	17
45-54	10	10	12
55-64	4	6	8
65+	3	6	9
Total	100	100	100

Source: Elton Consulting Edmondson Park Community Planning Study, 2003

Table 4: Oran Park Projected Population Growth

Year	Projected Settlements	Projected Occupied Dwellings	Annual Population Growth	Cumulative Population Growth
2008/9	250	125	380	380
2009/10	400	325	987	1367
2010/11	500	450	1366	2,733
2011/12	600	550	1685	4,418
2012/13	800	700	2126	6,544
2013/14	800	800	2430	8,974
2014/15	800	800	2430	11,404
2015/16	800	800	2430	13,834
2016/17	800	800	2430	16,264
2017/18	700	750	2280	18,544
2018/19	500	600	1822	20,366
2019/20	300	400	1214	21,580
2020/21	200	250	760	22,340
2021/22	150	175	532	22,872
2022/23		75	228	23,100
Total	7,600	7,600	23,100	23,100

Table 5: Turner Road Projected Population Growth

Year	Projected Settlements	Projected Occupied Dwellings	Annual Population Growth	Cumulative Population Growth
2008/9	250	125	387	387
2009/10	400	325	1008	1,395
2010/11	500	450	1395	2790
2011/12	500	500	1550	4,340
2012/13	500	500	1550	5890
2013/14	600	550	1705	7595
2014/15	600	600	1860	9,455
2015/16	400	500	1550	11,005
2016/17	250	325	1008	12,013
2017/18		125	387	12,400
Total	4000	4000	12,400	12,400